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BALTIMORE, AUGUST 21, 1913.

"NEWS" FROM MEXICO.

The wise course for the American people to follow is to wait until the day after tomorrow to read what passes in today's daily press as news from Mexico. Promoters of war with Mexico are just as determined and just as resourceful as were the promoters of the war against Spain. They cannot arrange for a blowing up of a "Maine" to "fire the populace," but they can attempt to find some other device to a similar end. Therefore, the people should not be excited over current reports, but should wait until the "news" has taken its place with recognized fiction.

THE OUTLOOK BETTER LOOK OUT.

The Outlook, Theodore Roosevelt, contributing editor, advertises its merits as an advertising medium by calling attention to the fact that members of the New York Stock Exchange bought 20,000 copies of its issue of June 28, containing "an authoritative article" "on the workings of the Stock Exchange," and that a leading railroad bought 10,000 copies of its issue of July 5, which contained "an important editorial by Theodore Roosevelt entitled 'The Living Wage and the Living Rate,' which is a plea for justice in dealing with the railways."

If The Outlook is not careful some cranks will be charging it with being

run in the interest of the New York Stock Exchange and the railroads.

A CHANCE TO RETRIEVE IN NATIONAL LEGISLATION.

It will mean nation-wide embarrassment if the impression of Speaker Champ Clark that tariff revision "is now practically an accomplished fact" shall be found to be authoritative. The tariff bill, confessedly one for less than revenue, contains a section designed to meet by way of an income tax the deficiency in revenue from duty on imports arranged for in the tariff rates. That section as it passed the House of Representatives and, notwithstanding a modification, as it came from the Senate finance committee contained a provision manifestly unconstitutional and physically impossible of enforcement. It deals with the withholding and payment of the tax from incomes at the source of the incomes, and it is made effective from March 1, 1913—that is, practically seven months ago—although the tariff bill has not yet become law. Should the bill pass in its present form, or as it left the House of Representatives, the income-tax section will be a dead letter in many respects, even if the whole tariff act be not suspended in its operations because of litigation turning upon its income-tax section.

It is believed, in the absence of any authoritative data to the contrary, that the calculations by the framers of the income-tax section as to the amount of revenue to be derived from the tax are overestimates. The incomes of corporations included in provisions of the measure are known within a reasonable degree, of certainty, but incomes of individuals represented by dividends of corporation earnings are exempt from the tax, and the incomes represented by interest upon bonds of corporations, by salaries or by other returns from the business relations of individuals are unknown quantities. The prospect of revenue from the income tax is, therefore, dubious enough without the interjection of impracticability or unconstitutionality into the situation.

Were it possible to withhold from the tax money that had left the source of an income six or eight months previously, though the feat is absolutely impossible, there would still remain the provision of the Constitution prohibiting the enactment of an *ex post facto* law. The combination in the pending measure of the impossibility and the unconstitutionality is a sure promise of a diminution in the returns expected from the income tax, and a consequent deficit in the aggregate revenues sought in the bill as a whole.

For more than four months the MANUFACTURERS RECORD has urged that, if we are to have an income tax, it should be one grounded in equity, constitutionality and workability. The urging has been the more persistent because of the lack of all three qualities in the creation of the Sixty-third Congress still

on the ways. The tariff schedules themselves are largely the result of guess-work added to unwillingness to receive enlightenment born of the suspicion usually belonging to inexperience. The income-tax section has about it just as much guess-work and more crudeness. It is fortunate, therefore, for the country that President Wilson has exerted his influence against a recess of the Congress. In the continuous session until the regular session in December the opportunity will be had to check up on the tariff bill, to eliminate its imperfections, especially those in its income-tax section, and to evolve a measure that will have about it at least coherency, consistency, equity and practicability, and which will stand the test of the Federal courts.

This outcome will call for the sacrifice of some prejudices and the destruction of some personal ambitions, but it will substitute statesmanship for politics and check the growing conviction that the tasks before the country are beyond the grasp of the elements temporarily dominant in the National legislature.

THE ALUMINUM INDUSTRY IN THE SOUTH AND THE TARIFF ISSUE.

The announcement has been made by the Southern Aluminum Co., which is now building a plant at Whitney, N. C., to cost between \$10,000,000 and \$12,000,000, that if aluminum is put on the free list, as has been proposed in the tariff discussion, the company will abandon its undertaking, and thus North Carolina would lose the establishment of the largest industry ever started in that State.

This North Carolina enterprise, while it has some American capital, is largely financed by French people, some of whom are interested in the great aluminum plants in Europe. The extent of the aluminum industry in this country and abroad is not generally understood. The United States is already producing 40,000,000 pounds a year, while there are a large number of aluminum plants in various parts of Europe, including France, Germany, Sweden and other countries, where water-power at a low cost is available, and where vast supplies of bauxite can be had at a low figure. Many of these foreign plants, if not all of the leading ones, are, it is said, syndicated, and their financial operations controlled by banking houses. Some of them are able to secure water-power as low as \$6 per horse-power per year, and the supply of bauxite is reported as almost unlimited—indeed, there is a great mountain of it, from which the material is mined at a low cost. The rate of wages in foreign plants is said to be about 80 cents a day for a twelve-hour working day, while in this country the rate for similar grade labor in aluminum work is about \$2 a day for an eight-hour day. The plant now in construction at Whitney involves the development of a

water-power, representing about \$2,000,000, for constriction work, which will provide over 100,000 hydro-electric power.

This is the first great enterprise of this kind ever started in the South, but another of even larger magnitude, one which, in fact, would represent an investment of \$25,000,000 to \$30,000,000, is that of the Aluminum Co. of America, which for the last three or four years has been busily at work securing power sites in Eastern Tennessee. This company has probably already invested \$2,000,000 or more in its preliminary work in that section. It has planned for the building of a number of dams, which would give an aggregate of 200,000 horse-power, all, or nearly all, of which would be utilized in the manufacture of aluminum, creating a vast industry, which would revolutionize much of the region in which this company proposes to operate, a country which at present, despite its vast natural advantages, is industrially backward in the extreme. If, as announced by the Southern Aluminum Co., its plant will have to be abandoned should aluminum be put on the free list, it is altogether probable that the Aluminum Company of America would have to follow suit and give up its great enterprise along the Little Tennessee River. These two companies would be active rivals, one strictly a foreign company, or at least wholly dominated by foreign interests, and the other, which created the aluminum industry in this country, strictly an American company. It would be a disadvantage to the South if, through false political economy, this section should be deprived of these two undertakings, the carrying out of which would mean the expenditure of \$40,000,000 or more in actual construction and development work, creating industries which would give employment to thousands of hands. Surely Congressmen from the South should be sufficiently interested in the industrial development of their section, for industrial progress is essential to agricultural prosperity, to see that the industries of the South receive a measure of protection fully equal to that given those of other sections. Of what avails our limitless stores of coal and iron and clays and other resources out of which to create vast industrial wealth if through false political economy these resources are to remain dormant, valueless to their owners, to the South and to the world?

CLINGING TO A GOOD THING.

Says the New York Times Analyst with reference to the politician's interest in farmers:

If the average farmer had been less pampered by politics he might be much more efficient. The commissioners who have been abroad studying rural credit schemes in Europe could tell him what agricultural thrift is, having seen it for themselves, and how little he has of that commodity, but they will probably not dare. The average farmer is very sensitive.

If the "American Commission on Ag-

ricultural Co-operation" shall contribute anything vital not already a matter of accessible record to the solution of the problem for which it was "assembled by the Southern Commercial Congress." It may justify to some extent the ostensible purpose of the pleasant jaunt in Europe of a party of Americans in the spring and early summer. It should be borne in mind that with the provision for the appointment of seven Federal commissioners to co-operate with the "American Commission" went an appropriation by Congress of \$25,000, and that there was an interesting dove-tailing of Federal commissionerships, American commissionerships and officials of the "Southern Commercial Congress." It is hoped that the \$25,000 will be adequate to meet the necessities of the case as far as the work of the Federal commissioners is concerned, but the bringing to the front of the word "permanent" as descriptive of the "American Commission" is bulging with promise that the European jaunt is not going to settle all the ills of American farmers right away. There is no doubt that quite a number of the members of the party took their three months' stay in Europe seriously and set themselves to the task contemplated in the literature of the enterprise. But they will naturally defer to the judgment of the promoters, and the latter, though they might dare, will hardly desire to bring the matter to a speedy conclusion. Else, they would not be emphasizing the word "permanent." Solicitude for the farmer is too good an agency for keeping alive public interest in an undertaking which, although it has received more or less support from quite a number of well-known and well-meaning Southerners in the past five years, has been rather an inconsequential factor, judged by tangible results, in advancing the material interests of the South or any other part of the country, or in advertising anybody but a few of its officials.

FEDERAL STATISTICS.

History, not statistics, is the characterization by the *American Lumberman* of much of the material now being circulated by the National Census Bureau, and, with reference to a recent bulletin, it says:

The figures relate to the year 1909, and at this late date their value is chiefly historical, and the *American Lumberman* has some doubt as to figures relating to an active business which are four years old being entitled to any space whatever in its columns. Eight or ten years ago the Census Bureau was given a permanent organization, one of the chief purposes being to enable the bureau to render its decennial reports more promptly; but for various reasons the outcome is the reverse of that intended. The reports are so long delayed that most of them have little value to the country, and, as pointed out by authorities, they are full of inaccuracies. Such a protest has been coming from all lines of business, and even from the students of social subjects to which many of the investigations of the bureau relate, that Congress and the administration cannot ignore the problem presented. Perhaps the bureau has been unnecessarily minute in its investigation along some lines, yet the business world wants all the facts available about the industries, but wants them promptly. Enough money has been spent and wasted to accomplish the desired results if the affairs of the bureau had been properly handled.

It is true that the argument for the creation of a permanent census bureau was that the work of the decennial census would be speeded. But, in the judgment of men who have had to deal with the output of successive censuses, the efficiency of the bureau has stead-

ily declined from the day that it became permanent. As organized at that time, the bureau was not qualified to give a real reason for its permanency, and so was occupied largely in evolving an intricacy of detail from material on hand, a species of marking time. That habit became so fixed that it was imposed upon the work of the 1910 census, with the result that although four years have elapsed from the time with which some of its material deals, it is impossible to make comparison in some fields of 1900 and 1910, and the current bulletins or synopses of bulletins are largely mere elaborations of figures that have been public property for two or three years. It is a pity that the whole field of statistical work by the Government cannot be organized on a systematic and effective basis.

ON SUPERFLUOUS ORGANIZATIONS AT WASHINGTON.

Early in March, 1912, the MANUFACTURERS RECORD advised the business interests of the country not to support the "National Chamber of Commerce" then in course of incubation with the enthusiastic assistance of a bureau of the Department of Commerce. Our opposition was based upon the conviction that the intimacy between the Government and the personal undertaking proposed in the scheme was improper and potential of embarrassment; that there were already at Washington too many organizations of the kind theoretically in aid of the country or some section of the country through a nebulous contact with Government activities, but practically an incubus upon the country, and that the latest proposition was likely to go the way of the others and to become essentially merely the excuse for maintaining an unnecessary lot of salaries. Five months later, after the scheme had been floated, we said:

From among the several hundred local organizations of the country designed to further the material interests of their respective communities it is a comparatively easy matter to secure membership in some such project as the "National Chamber of Commerce" sufficient to give it a start and to place it at a supposedly strategic point like Washington a salaried staff. Among these organizations are quite a number which are actually only excuses for paying salaries to "publicity experts," self-styled, with no record of practical results from their "expertness." Such bodies may be expected to be unanimous in support of the Washington project. Others engaged in legitimate development work are able to discover hopes that their work may be strengthened by co-operation with a national center. The necessary fees, scattered over a large membership, are an inconsequential factor. But there are a great many other bodies with trained men as their executive officers who move slowly, if at all, in supporting the schemes, firstly, because they understand that, as in the case of every other business enterprise, the business of promoting a community's welfare cannot afford to waste money upon dreams; and, secondly, because they are unwilling to be committed to undertakings which, left in execution to a small group at a distant point, may prove embarrassing if not pernicious.

To the MANUFACTURERS RECORD the question of money to be spent in supporting enterprises of the kind or that of the number of organizations or individuals who may be induced to join is of minor importance. Though it is regrettable that earnest men

should still believe that such bodies may be a public benefit, the chief objection to the "National Chamber of Commerce," which we noted several months ago upon the first announcement of the plan, is that not only is such an organization unnecessary, but in its very nature, with its plan for Federal incorporation, and with the vague allusions of its promotion to the possibility of Federal aid and the relations which it will finally sustain with Government departments, it promises to be a drawback upon the country.

These comments, iterating our earlier opposition, followed sharp and sensible criticism of the scheme by the *New York Journal of Commerce*, based upon the manifestations of the promoters. A year has passed, and now the *Journal of Commerce* returns to its criticism, and in that justifies the position that we took at the outset and have had no reason to leave. It says:

Severe criticism is being visited upon the authorities of the Chamber of Commerce of the United States in consequence of the report of the committee or commission on banking and currency which went to Washington some time ago on behalf of the chamber, looked over the new banking and currency bill and presented recommendations. This criticism is not founded so much upon the statements or suggestions made in the report as it is upon the alleged fact that the document was given to the public without the formal assent of some governing body of the organization, or, preferably, as a result of a referendum or other submission of the document to the members. * * *

The criticism is acquiring strength because of the fact that there is a disposition reported from Washington to use the report of the commission in question as representing the attitude of the business public and of the commercial bodies of the country at large toward the pending bill, whereas it is stated by some that the report in no sense represents that attitude.

Following that comment dealing with the possibility of the Chamber of Commerce's being overestimated by the uninformed, the *Journal of Commerce* says:

Considerable irritation has developed among commercial organizations both here and elsewhere because of the tactics employed by the United States Chamber of Commerce in its campaign for memberships and funds.

The Chamber has been making a thorough and exhaustive canvass for money and has been requesting firms, banks and other concerns to make donations with which to enable the Chamber to carry on the work in which it has been engaged for some time past. The result, it is felt, has been to interfere to some extent with local enterprises which were first in the field and with which there was no good reason for interfering. Particularly is this said to be the case in view of the fact that sundry of these local organizations are members of the United States Chamber of Commerce, and thus are being placed in the somewhat peculiar position of furnishing funds and support for a movement designed to destroy their own lines of support. It is felt by many judicious persons who have examined the situation that there is not an unlimited supply of cash and resources in the commercial community which can be drawn upon for the purposes of organized effort and that it is undesirable to draw it off into unnecessary channels.

There is special criticism upon the United States Chamber of Commerce because of its policy of establishing branch offices at various points. These branch offices, it is alleged, tend to interfere quite materially with the efforts of local commercial organizations, and in general the efforts of the United States Chamber, it is now being found, are of a nature to hamper the local organizations through its additional drafts upon the time of individuals for committee

and other duty when such individuals would normally and naturally be doing similar work for their own home organizations.

When the United States Chamber of Commerce was first organized there was almost a distinct promise that nothing to be done by the Chamber would be suffered to interfere with the work of local bodies. The Chamber was to be composed primarily of representatives of such local bodies and was not to compete with them. It was to supplement their work and strengthen it, not to detract from its efficiency. This sort of talk was indulged in by some of the members of the Taft administration who were working on the plans for the organization as a means of showing their own activity and efficiency along administrative lines. Similar promises were put out by private individuals who were drawn into the plan, and who then wanted to gain the support of local commercial organizations and reassure them as to the danger that they might be interfered with by the efforts of the new concern in a field that was already overcrowded.

There has been doubt in the minds of experts in commercial organization from the very first as to whether the United States Chamber of Commerce could fulfil a useful purpose and whether there was not some reason to feel that it would divide up the support and success of work of that kind to a degree that would more than offset the good it might do. This doubt has now been materially strengthened, according to the expressions of local authorities on the subject. There also seems to be doubt in the minds of merchants and others who are being approached for aid in the matter, and a considerable number of the latter have recently written letters to men who are familiar with the facts in the case inquiring as to the work of the United States Chamber, the character of its methods, the results thus far attained, and other matters of the same sort.

This is an overorganized country, and yet not a properly organized one. The energies of the people have not been assembled as they should, because they have been dissipated in organization appealing plausibly to the best sort of intentions, but inspired by the desire of an increasing number of persons to enjoy a living without engaging in productive exertion or in work that will contribute to production. Success in promotion of organizations that are not necessary rests upon the fact that very few financial supporters of organizations claiming to undertake matters they themselves have no time to handle concern themselves about the results, and that so many of these supporters are content with glittering generalities handed out to them by their salaried employees instead of demanding definite and regular expositions of things accomplished on the lines proposed and promised as the means of obtaining their subscriptions of membership. These easy-going contributors, laboring under the impression that any kind of publicity is valuable advertisement, and unaware that much of current expertness in publicity work is expertness only in giving advertisement to the expert at the expense of somebody else, can hardly realize what an important center Washington has become for members of a new "profession" of alleged publicity or influence, and how easily these "professionals" slip from one salaried nook to another without being able to demonstrate that they have rendered any valuable service to the country in any nook they have occupied. Their avidity and their appreciation of the value of organization—to themselves—account in large measure for the frequency of movements for the formation of this body or that, and when they can secure the co-operation of an occupant of some Federal position anxious to emphasize his importance to the country or of some Senator or Representative keen to any means of advancing his political

DEVELOPMENT NEWS WELCOMED.

Items of news about industrial, railroad or financial interests, building operations, construction work, municipal improvements, or the sale of machinery or the letting of contracts in the South or Southwest, are invited from our readers whether they are advertisers or subscribers or not. We invite information of this character from readers in the North and West about their Southern business operations, as well as from Southern readers. News of value will be published just as readily when from non-advertisers as from advertisers.

ambitions, the temporary success of the movements is assured.

The "National Chamber of Commerce" has had the practical encouragement of quite a number of men, some of them prominent men, who have believed that it could be made a practical, working body of use to the business of the country. But are they convinced, after an experiment for more than a year, that, measured as they would measure any business enterprise, it has justified the money and time spent upon it? Perhaps, if the men or the organizations that have given it financial support should take the trouble to study it, they might be led to recognize the soundness of the contention that such undertakings are usually not only not necessary, but that they may actually become drawbacks.

HARD ON THE COUNTRY.

Referring to the situation at Washington, the New York *Sun* says:

Too little public attention is being paid to the progress of banking legislation at Washington. The amount of illuminating discussion which the subject is receiving is appallingly small in proportion to the tremendous importance of the matter.

Why should public attention be paid to the subject? The American people have been virtually informed that legislation at Washington is none of their business. In every way possible the men best qualified to render practical aid and the men most concerned for the maintenance of the activities upon which rest the progress and prosperity of the whole people have been encouraged to keep off the grass. The individuals who are going through the form of legislating for the country have aeroplaned to a sublime height, where they feel the need of no fruits of experience and knowledge to aid them. They have not yet claimed divine inspiration, but they have paraphrased *vox populi vox dei* into a fictitious "mandate from the people" or "edict of the people," and, hugging that delusion, they plunge along their ochlocratic way. Substantial men were warned against interfering with the representatives of a minority of the people in the framing of a tariff-income measure, and the House of Representatives, or at least the caucus-clogged majority of its members, passed an unconstitutional and inchoate bill with which the Senate is still aimlessly wrestling. Experience with that measure was sufficient to check any ambition to assist in the framing of the more important currency measure.

Nevertheless, the situation is alarming. It can be explained only upon the theory of a combination of inability on the part of so-called moulders of public opinion to discuss the currency question intelligently, of desperation on the part of material interests to combat intransigent truculence on the part of inepts in constructive legislation and an optimism on the part of the masses born of a temporary paralysis of their common sense.

TWO POINTS EMPHASIZED.

I HAVE \$3000 to invest, with services, in an established and paying business in the Piedmont section of the South; am 29 years old, single, and a hustler. Address No. 1302, care Manufacturers Record.

The foregoing advertisement appeared in a recent issue of the MANUFACTURERS RECORD. Already we have received and forwarded to the advertiser forty-six replies. Two points are thus brought out very clearly—one, the value of the MANUFACTURERS RECORD as an advertising medium, and the other, the many opportunities offered

for hustling young men with some capital.

INVESTIGATE BEFORE PAYING MONEY.

Southern business men should be careful in dealing with unknown reputed financial institutions in this country and abroad, and secure satisfactory references as to the standing of such concerns seeking business in the South before sending any money to them. The MANUFACTURERS RECORD often hears of promotion concerns, sometimes operating in this country and sometimes operating from Europe, offering to provide millions of capital for Southern enterprises, but demanding advance fees before making any investigation or giving consideration to enterprises submitted to them.

The reputable substantial houses of this country and Europe do not make propositions of that kind. It matters not if some institutions demanding these advance fees have high banking titles, their standing should be investigated before any money is remitted to them.

STILL AN UNKNOWN LAND TO MANY.

Notwithstanding all that has been written about the South, much of the country at large is still ignorant as to the resources and progress of this section. This is illustrated in a letter from Mr. Charles Wooden, secretary of the Board of Trade of Niagara Falls, N. Y., who, in a letter to the MANUFACTURERS RECORD, says:

"The South: The Nation's Greatest Asset" is certainly a revelation. I did not dream that Southern cities have grown so much. We have put it out to be read.

This is only typical of the many cases that could be given of people in the North and West who do not know the vastness of the South's resources or of the greatness of its progress. Much yet remains to be done to make these things known to the people of the whole land.

WESTERN CAROLINA AIR.

Writing of the air of the mountain region of Western Carolina, a correspondent of the MANUFACTURERS RECORD says: "You hear of air that is like wine. The only place I know of to find that is around a barroom. The wine was never distilled that would do for a man what this air will. Some nights my throat has tightened up on me and knocked out a bit of sleep, but the clear freshness, after the sun rises, soon drives away the tired feeling; so I am inclined to think that the poetic phrase 'air like wine' is unjust, wine being the devil's brew that burns; the mountain air God's pure breath—thank Him—that builds."

HIGH COMMENDATION.

The New Orleans *Picayune*, in referring to the MANUFACTURERS RECORD, calls it—

"The most intelligent and persistent guardian and advertiser of the South's resources."

A higher commendation could not be asked.

Manager E. N. Hopkins of the *Ozark Produce Journal* of Fort Smith, Ark., writing to the MANUFACTURERS RECORD regarding the fruit crop, says:

"While in Springdale this week, where we shipped 150 cars of luscious Elbertas and other varieties of peaches, I never saw anything like our crop of peaches, and the prospect for apples is equally as good. Surely we have a wonderful country."

The Steel Corporation and the Birmingham District

[Special Correspondence Manufacturers Record.]

Birmingham, Ala., August 18.

The Birmingham of today, with its dozen skyscrapers, its traffic squad, cluster street lamps, widened sidewalks and palatial homes on the terraced hillsides, looks quite metropolitan, and in decided contrast to the village that it was not so very many years ago. Before the figures have been consulted it is plainly evident that a great growth has occurred in recent years. Local statisticians figure that the present city population is 170,000, in comparison with 132,000 in 1910, while in 1900 there were something less than 39,000 within the limits of the town as constituted at that time. In addition to the big buildings that have been put up within the past few years, it is stated that the value of building improvements now under way amounts to \$7,000,000. Included in these are the 25-story office building of the Jefferson County Savings Bank, now nearing completion; two much-needed modern hotels, the Tutwiler, 12 stories, and the Roden, 10, and the nine-story \$600,000 Ridgely apartment-house. The steel frames for the three last-named structures are completed, and it is the expectation that all will be finished within the next few months.

There are already eight steel construction office buildings here, besides a few others of modern construction, not steel, and it is a very pertinent fact that they are occupied. President Harding of the First National Bank says that the offices in that building are 100 per cent. occupied, and not a tenant delinquent, and almost, if not quite, identical conditions are understood to exist in all the other modern office buildings here. Bank deposits and figures as to the volume of business done are hardly more significant than these facts in indicating substantial conditions and healthy growth.

Bank deposits are \$26,000,000. The number of railroad cars handled in 1912 was 918,362; tons of coal produced, 18,219,865; tons of iron, 1,833,658; tons of steel, 716,301; tons of coke, 3,308,036.

The payroll in the Birmingham district amounts to \$1,000,000 a week, which means that the earnings of the workmen here are \$166,666 for each working day, or \$6944 every hour of the working day. Tremendous is the advantage of a city that has a constant stream of life-blood flowing through it like that, and this is a steady and a constantly-increasing stream. Except for 1908, when the effects of the panic of the fall before were felt throughout the year, the increase has been continuous for a number of years, having advanced with a steady ratio since 1905, with \$40,000,000 annual payroll for that year. In 1908 it dropped to \$34,675,000, but the very next year it jumped to \$44,075,000, and has been climbing at the rate of from \$1,000,000 to \$2,000,000 a year ever since.

For some years there has been a disposition in the district to get away from mere pig-iron production and into a great diversification and a more refined product ultimately than can be found in the Pittsburgh district generally, where heavy tonnage and big shapes have always been the trend. While there does not seem to have been anything like a notable development here as yet along the lines named, there is evidence of more or less effort in that direction, as shown by an occasional plant founded for working up iron and steel into refined products, and in the expansion of plants making engines, hoist-

ing machines, air compressors, radiators, etc., is a promise of precisely the kind of development that is certain to be of greatest advantage to the Birmingham district. When made into watch springs, steel gets to be worth something like \$20,000 per ton at the factory, and all down the line, till iron bathtubs and radiators are reached, there is a proportionate benefit to the community in selling the output of the district as the finished article instead of as iron pig or billet of steel. It would seem that the same district conditions which have operated to the advantage of engine builders and others should, with adequate skill and enterprise, enable a large line of toolmakers and other artificers in metals to be altogether successful in the conversion of Birmingham iron and steel into much more highly finished products.

Some years ago, it was declared by a former officer of the Tennessee Coal, Iron & Railroad Co. that the end toward which the company would aim was the manufacture of every pound of iron and steel the works turn out into a finished product, ready for the consumer's use. Announcements are not made here as to plans and purposes, it having become a fixed rule that information for the public press shall emanate only from the New York office, but the most superficial observation by the visitor to Ensley, Fairfield and Bessemer demonstrates that a great start has been made in that direction. While it may be true that the \$21,000,000 spent here in the past six years by this corporation—since the United States Steel Corporation acquired the Tennessee properties—represents largely the replacing of worn-out machinery and equipment with new and establishing a plant where good steel can be made on a competitive commercial basis, and modernizing all old plants and building some new ones like the \$3,000,000 by-product coke plant, yet in this work such striking steps have been taken as to fill the observer with enthusiasm as to the ultimate development of this section. It is all so broadly laid out and so widely conceived, with such a far-sighted view as to future great requirements, that one is forced to accept the predictions of those who believe that the Birmingham of the present is only suggestive of the Birmingham of the future. A most notable instance of the trend toward the production of finished articles is furnished in the case of the American Steel & Wire Co.'s operations.

The huge wire mill at Fairfield, which will cost \$4,000,000, will employ 1500 hands and consume 450 tons of steel a day in the manufacture of fencing wire, nails, etc. After two years' delay, work on the plant has been resumed, and it will be ready for operation about the first of the year. It was announced originally that this plant, which covers 18 acres, being 1650 feet long by 450 feet wide, is only one of a group of four similar buildings to be built on the 96 acres of ground the American Steel & Wire Co. owns at Fairfield, the name by which the model factory town formerly called Corey is now officially known. Just how soon any extension of the plant will be made, or what steps will be taken in the near future to establish other plants for the manufacture of steel into commercial forms is not known here, but such plants would seem the logical and inevitable development that would follow the vast expenditures made in putting the Tennessee

Company's plant in shape to make good steel on an economical basis. That this result has been reached is evidenced by the fact that the best steel rails in the country are now turned out at the Ensley plant.

Since the Tennessee Coal, Iron & Railroad Co. in November, 1907, passed to the ownership of the United States Steel Corporation there has been spent for improvements and developments \$21,000,000. The former management had four open-hearth furnaces just about completed when the new company took hold. They were finished up, but the \$21,000,000 represents additional expenditure, and with it about everything has been done that was planned at the beginning as being immediately necessary for efficiency and economy. The present furnaces and steel mills at Ensley are practically all new construction. Four additional open-hearth furnaces were built, giving eight in all. New heating furnaces and new engines were installed at Bessemer to replace worn-out stuff. A new and model power plant has been constructed; two turbo-generator stations have been built, one at the steel works and one at the blast furnaces, through which a great saving is effected, and applying the same methods of saving to the blast furnaces, three turbo-blowers are to be installed.

The same economies have provided an absolutely smokeless chimney for the power plant. Mechanical stokers secure such high combustion that never is there soot or grime. The Tennessee Company will furnish electrical power to the wire plant, so Fairfield will be a smokeless, spotless town; however, it must not be inferred that all smoke has been, or will be, eliminated from the district. Metallurgical furnaces do now, and probably always will, make a very considerable amount of smoke, and by-product coke plants, although harmless compared with the beehive oven, can still hardly be said to do much toward purifying the atmosphere. Nevertheless, mechanical stokers and all the other devices are making it impossible for huge volumes of sooty smoke to belch out of the chimneys and cover the land like a volcanic eruption. And as cleanliness, comfort and health are cardinal principles with the steel company, on the theory that they help to make character, and character is indispensable to good work, it may be set down as a certainty that shop, district and home conditions will be as cleanly and as sanitary as they can possibly be made through careful planning in the first place and by constant watchfulness afterwards.

Wonderful things have been done in the district that without the money and the skill that the United States Steel Corporation commands couldn't have been done here in 50 years, if at all. The company's great water-works system, which has a daily capacity of 50,000,000 gallons, cost \$3,500,000. By raising the dam a few feet 100,000,000 gallons daily may be secured when needed. Without this water, the improvements that have been made never could have been carried out, for water is the one element in iron and steel production with which Birmingham had not been abundantly supplied. The by-product coke plant could not have been built and operated without the water-works system, and the wire mill never would have been started. It having been demonstrated that it was entirely feasible and necessary to pipe and pump water to the plants, the expenditure was authorized, and a great system has been installed. The dam, tunnels, the pumping plant and the power-house are all of unusual character and construction, and

all represent the highest obtainable efficiency in their line.

The by-product coke plant is one of the notable features of recent construction. It takes the place of some 2500 beehive ovens, and works great economies in coke production. An increased quantity of coke per ton of coal used is secured, while by-products of tar, ammonia, gas and sulphate of lime of great value are recovered. The gas is utilized in the Ensley furnaces. The plant is an elaboration of the Koppers system, strengthened, reinforced and extended, as would have been possible only with large means at hand. The thoroughness with which the United States Steel Corporation does things is demonstrated in this by-product instance. A committee visited Europe, studied all the coke-making methods over there, found that the only beehive ovens in Germany were in museums as relics, and then decided on the Koppers system, with modifications, as the most desirable for United States Steel Corporation uses. There are plants at Joliet and Gary, built since the committee made its report and recommendations, but in no other probably are the results of experience so advantageously combined as at the Fairfield plant.

Wonderful as all these developments are, the feature in this work that strikes me as most wonderful of all is the consideration given to the human element. No welfare commission could give half the practical, efficient inspiration and benefit which is here found as a mere part of every day's activities. There is no exploitation, hardly a passing mention in discussions of the situation, and yet what is being done here in the camps and villages where miners and laborers live would justify pages of enthusiastic praise. Corey (now Fairfield) was widely heralded, and justly so, as an advance in town building for the accommodation of laboring men and their families. It is as attractive as any Eastern model factory town, and is as handsome and well kept as a resort town by the seaside. But it gives one a start to find equally attractive features in a coal-mining camp of the Tennessee Company. The "camps" at Doceena and Edgewater have been built, and one at Bay View is under construction. These towns or camps are really handsome villages, with tasteful houses designed by architects with brains. They have flower gardens and trees, and truck patches in the back. There are playgrounds and plazas, and the most modern of schoolhouses and churches. The commissary carries the same provender and wares that are found in the city stores, and the prices are below the current rates. Meats and vegetables are carefully screened and refrigeration is provided wherever required. The people are encouraged to organize for pastime, amusements and social commingling. A brass band of 50 or more pieces has been organized among all the employees of the Tennessee Company, and they have become a really excellent band. They give concerts at various places from time to time, and are a feature highly prized by all. There is also a male chorus of 100 or so remarkably well trained voices.

The camps are sanitary as can be, and bacteriologists and other specialists are always on hand to investigate, advise and check up. The houses are screened, and so are the box tents; also, there are bath-houses at all the mining camp; where the men can scrub down at the end of the day, take off all their working clothes and put them in a locker, changing to a dry, clean suit before going to their homes. Almost to a man, the miners avail themselves of this opportunity.

Only the barest outline of the system of welfare work in effect all over the district is indicated by the instances here given. These facts, however, will suggest that the health and safety of the men and the well-being of the family are matters of evident first consideration with the company. It is also worthy of remark that these welfare measures seem to be regarded by the management as "all in the day's work," and merely matters of course.

ALBERT PHENIX.

TO DEVELOP VAN HORN VALLEY.

\$1,500,000 Company Plans 60-Mile Railway and Irrigating Land.

Capitalized at \$1,500,000, the Van Horn Valley Land & Railway Co. plans to construct a 60-mile standard-gauge railway (costing about \$10,000 per mile) and developing land in the Van Horn Valley of Texas. This land is underlaid with water at shallow depths convenient for irrigating by pumping, and it is proposed to install pumps and market the land in units of 40 acres and more. R. H. Owen of Minneapolis, Minn., president of the company, wires the above report to the MANUFACTURERS RECORD and writes as follows:

"We might add that the Van Horn Valley is peculiarly adapted for irrigation by pumping. It lies at the level of about 3600 feet, while the surrounding mountains on either side rise to 6000 or 8000 feet. It has a drainage area of 350 square miles. The Sacramento River flows into it from the north, but the water percolates through the porous silt soil until it strikes a gravel strata beneath the surface from 20 to 60 feet, where it forms a reservoir of several hundred feet in depth and is practically inexhaustible. A large variety of crops can be grown where water can be obtained in that country, especially peaches, pears, grapes, cantaloupes and melons, in addition to a large variety of general and staple farm products, such as vegetables, cereals and particularly alfalfa hay. The valley is capable of supporting a very large population. A 40-acre farm, in fact, is plenty large enough, while a good living can be made from 10 or 20 acres. We, however, propose to adopt 40 acres as the minimum unit. We want to appeal to people who wish to carry on mixed farming rather than those that want to specialize in vegetables and fruits. A 40-acre farm would make it possible for a man to grow a nice orchard, raise a limited amount of vegetables and in addition a considerable amount of forage crops."

The Van Horn Valley Land & Railway Co. was incorporated by R. H. Owen of Minneapolis. J. M. Daugherty, J. Y. Canon and Joe Irby of Van Horn, Tex.

American Mining Congress.

That the manufacturers of mining machinery and appliances and the makers of safety and rescue devices have been awaiting just such an opportunity as will be presented in Philadelphia, October 17-25, when the American Mining Congress will hold its first national mining show or exposition, became pleasantly apparent to the officers of the Congress a few days after the project was launched. There has already been such a response from manufacturers that it is feared there will not be space for all who may apply.

It is already regretted by the congress that Horticultural Hall, in which the exposition is to be held, is not larger, and while it may prove inadequate to the demands to be made upon it, nevertheless it is large enough to stage a great industrial show.

There is already some talk among the officers of the Congress of cutting down

the amount of space being asked by the larger corporations in order that there may be a greater diversity of exhibits. Provisional contracts are being made to meet this contingency if it arises.

"The manufacturers have been quick to appreciate that this will not merely be an industrial show to satisfy the curiosity of the public," said Richard L. Humphrey, the director of the exposition. "They realize that the convention of the American Mining Congress, which is to be held during the week of the exposition, will bring to Philadelphia a great gathering of practical mining men who are directly interested in the exhibits and men who will either be purchasers then and there, or who will make their purchases after returning home and weighing the efficiency and need of the devices. The exposition will be the first general national clearing-house between the men who make mining machinery and the men who use such machinery. Mining men in need of new equipment understand fully what a tremendous task they have on hand when they start out to find the machinery that is best adapted to the conditions of their mines. They see their opportunity in the mining exposition. The indications are that the American Mining Congress will have the greatest and most representative convention in its history. Many mining men will attend the convention because of the mining exposition, and many more will attend the mining exposition because of the convention."

"Probably no industry so vitally affects the future welfare of this country as that which has to do with the proper utilization of its mineral resources. At this moment, when the administration of the Government is going through a critical readjustment to meet economic conditions, it seems important to bring to the attention of the public in an educational way the essential facts relating to the mining industry and especially to the utilization of our coal resources. This exposition will not only be useful in establishing public confidence in the mining industry, but will serve as a means by which efficient methods of operation may be brought to the attention of mine owners. Experts of world-wide fame and ability will attend the American Mining Congress convention, and addresses will be made on important subjects by recognized authorities."

"It is proposed to bring together at the exposition a variety of exhibits affording instructive object-lessons of greatest value to the future of the mining industry. The American Mining Congress and the first mining exposition will afford an unusual opportunity for the interchange of views, and is by far the most comprehensive attempt that has been made in the history of the mining industry to demonstrate its needs and the efficient utilization of the mineral resources of the country."

To Manufacture Fruit Jars.

The White Crown Fruit Jar Co., Louisville, Ky., has been incorporated with \$250,000 capital stock by J. L. Craig and Otis W. Pickrell of Louisville. Julius F. Funk, Jesse Rice and W. K. Bracken of Bloomington, Ill. This company will establish facilities for assembling at Louisville the products of fruit jar manufacturers, and intends later to build a manufacturing plant, investing from \$250,000 to \$300,000 for the buildings and machinery.

Arrangements are being completed for the seventh annual convention, to be held at Pittsburgh, Pa., September 22-26, of the Illuminating Engineering Society.

Climate and Possibility for Development of the Florida Keys.

By RICHARD WOODS EDMONDS.

Last March, when the writer told his friends his intention of spending the summer as civil engineer on the Florida Keys, between the southern tip of the mainland and Key West, they were horrified. "Florida in the summer? Never! You'll die of fever or be devoured by mosquitoes!"

Fever is unknown on these keys.

In the dense thickets that cover all the keys that have not been cleared the mosquitoes lurk in countless millions, but only on the rare occasions of comparative calm do they venture out. For a week in June they were very bad. Then the wind returned and soon blew them all away. That was two months ago, and they haven't been back since.

The climate is delightful, reminding one of that of the White Mountains. Incredible, you say? Aye, but it's true, nevertheless. The ocean is on every side—there can be no sudden change of temperature—and the wind, a cool, delightful sea wind, blows almost incessantly. The range of temperature from winter to summer is from 40 to 90 degrees, rarely going outside these limits. In addition, the humidity is remarkably low. Not only is the climate remarkably pleasant, it is also remarkably healthful. Malarial fever is altogether unknown here, and the other 999 "ills that flesh is heir to" are very few and far between among the hundreds of white men coming directly from the Northern cities and employed in the Florida East Coast construction camps, as well as among the natives.

The opportunities for agricultural development on the keys, the writer believes to be good. The soil of the keys is very rich, and they are below the frost line, so that early vegetables could be raised. Fresh vegetables of all kinds would find an eager market in Key West. Mangos, avocados, or alligator pears, sapodillos, sugar apples, grapefruit, limes and oranges grow well here, the key limes being the finest in the world.

The chief problems to be solved by the agriculturist are (1) planting, (2) drinking water, (3) transportation.

The first is a problem because of the formation of the keys, which is coralline, and full of pot holes. The first step is, of course, to clear off the dense wild growth and burn it. This is not difficult, as none of it is larger than a bush. The pot holes are full of a mixture of sand and loam, the latter being the accumulation of centuries of the luxuriant vegetation. It is fertile beyond belief. The oldest method of planting is to plant the young trees in the pot holes without any attempt at order. A more modern method is to break the rock to a depth of four or five feet by many small charges of dynamite. This not only makes systematic planting possible, but by cracking the rock to a considerable depth affords a firm enough hold for the roots of the trees to enable them to stand any wind that blows.

The second problem may be solved in either of two ways—by shallow wells, which give fresh surface water, or by cisterns, the latter giving excellent water. The cistern will cost from \$75 to \$200 or \$300, or even more, according to the size and type of construction. The water will keep fresh and pure indefinitely.

For the man living on a key crossed by

the railroad, the third problem is already solved. Nearly all the keys are within 5 or 10 miles of the line, and small boats will carry the produce to the road.

All the fruit the keys can raise will find a ready market. A good many comfortable fortunes have been made in fruit on the keys, many more are being made, and still the development is in its infancy.

Among the smaller cities of the South destined to have a rapid and steady growth is Key West. It is a gateway to Cuba and the other islands south of us, to Central and South America, and to the Panama Canal. It is the terminus of a railroad which Elihu Root, while Secretary of State, is reported to have said would be second only to the canal itself in influence upon the commerce of the nation. It has a fine natural harbor. Ever since the opening of the road, large quantities of freight have been daily shipped through Key West, going both north and south. In the winter season thousands of tourists also make the trip, most of them going on to Cuba, and with the opening of the canal this traffic will be increased. Of the 30,000 tourists who passed through Key West last winter, only about 300 or 400 stopped over night. They could not find satisfactory accommodations. Here is Key West's crying need. It has fine hotel sites and irresistible attractions for tourists, and will offer good inducements to build. Here is an opportunity for investment that is well worth investigating.

There are two difficulties to overcome in the development of Key West. One is founded on fact, and stands in the way of manufacturing and all industries requiring large amounts of fresh water. The other is founded on fancy, and stands in the way of settlers. Borings have been made for water, but without success, and it looks as if water will have to be piped in from some other key or from the mainland, a very small task compared with the 250-mile aqueduct Los Angeles is just completing. Where not much pure water is required, cisterns solve the problem well. Rainwater falling through the pure air of the Island City is bound to be pure, and for a small amount of money a cistern can be built and kept in such condition that the water in it will be ideal drinking water, keeping indefinitely. The cistern water the writer drank in Key West was as good as any water he had ever drunk, and the freedom of the population from typhoid fever and all other troubles caused by impure water is a convincing argument in favor of it.

The other difficulty is educating the public up to the point of believing in Key West's summer climate. When summer comes on the tourist shuns Key West as he would the plague. He believes it to be the birthplace and central supply station for all the mosquitoes and malaria in the country, and you can't convince him that it isn't hot enough to sizz like a flat-iron if he will touch it with a wet forefinger. There was never a greater mistake. There are fewer mosquitoes in Key West than in most cities on the mainland wherever the writer has been in summer (most of the Southern, Eastern and New England States). Malaria is unknown here, and all other ills are few and far between. The climate is as healthful as any

in the United States. The range of temperature from winter to summer is from 40 to 90 degrees. Rarely, indeed, does it go outside these limits. The humidity is remarkably low, and a strong cool breeze blows almost incessantly throughout the summer. The damp, sticky heat that makes Northern cities so oppressive is never felt here. When cities all over the country are sweltering in the almost unbearable heat, and nearly every day people are overcome or killed by the heat, the Key Westers are enjoying life and an ocean breeze, and "all the comforts of home." When the Northern cities are shivering in the icy blasts of winter, the Key Westers are still enjoying the breeze and the ocean bathing.

WIDENING SPHERE OF INFLUENCE

How Hillsboro County's Million-Dollar Bond Issue for Roads is Bringing Results.

Three weeks ago Hillsboro county, Florida, in which Tampa is located, voted \$1,000,000 of bonds for brick roads. The MANUFACTURERS RECORD in publishing this commented upon the great influence which this vote would have upon the development of the city and county and what a splendid highway would be completed when other counties had voted bond issues sufficient to bring about the building of a paved road from Tampa to Jacksonville, as is proposed.

The Seaboard Air Line Railway, through its industrial agent, J. A. Pride, quickly caught the meaning of this bond issue, and in a full page advertisement in the MANUFACTURERS RECORD of August 7 made it the striking feature, advertising Tampa and the surrounding territory under the heading of "Tampa: South Florida's Progressive Center." The prompt action of the Seaboard in utilizing the opportunity to advertise the influence of this bond issue upon all that section has commanded much attention in Tampa and the surrounding country.

President F. C. Bowyer of the Tampa Board of Trade, writing to the MANUFACTURERS RECORD in regard to the matter, says: "We have read this advertisement with much interest. The letter of your editor to the Tampa Tribune advocating the bond issue strengthened the position of the good roads advocates and doubtless aided in increasing the majority in favor of this great improvement."

"The Tampa Board of Trade feels that the MANUFACTURERS RECORD has for years been of assistance to those in this section who are endeavoring to develop the almost limitless resources of this State, and to say that we appreciate it expresses it very feebly."

The Tampa Times referred to the Seaboard advertisement under a big display heading:

"Seaboard tells of roads bonds.

"Using action as text for great ad.

"Spreads advantages of Tampa section before world through MANUFACTURERS RECORD."

Under this heading the Times published in full in its reading columns the advertisement of the Seaboard as illustrating the great value of this work to that section.

The Tampa Tribune in a column editorial about the matter under the heading of "Telling Tampa's Story," says:

"The Seaboard, through J. A. Pride, its general industrial agent, has a page advertisement in the current issue of the MANUFACTURERS RECORD, taking as a text Hillsboro's vote of \$1,000,000 for brick roads. The advertisement is under the heading, 'Tampa: South Florida's Progressive Center,' and gives the facts about the brick road vote, with the comment

that if any further proof of the progressive spirit of that portion of the State were needed, 'it would be found in this action for good roads.' The Tribune put into its editorial columns all of the facts presented in the Seaboard advertisement, and then added:

"The Tribune stated while the brick road bond campaign was on that if carried it would afford one of the biggest advertisements, not only of Tampa and Hillsboro, but that South Florida ever had, and we are quickly realizing that prediction. Too much appreciation cannot be shown the Seaboard and Mr. Pride for their kindly assistance in spreading the good news. An advertisement like that in the MANUFACTURERS RECORD is of inestimable value to this section."

The Seaboard was quick to see that the building of 75 miles of brick highways in Hillsboro county would add enormously to the prosperity of that section and make all of Hillsboro county a more attractive region for settlers who want to locate in a developing country having the benefit of modern highways. Thus the vote of Hillsboro county is being widely heralded throughout the land and used as an advertisement to draw men and money to that section.

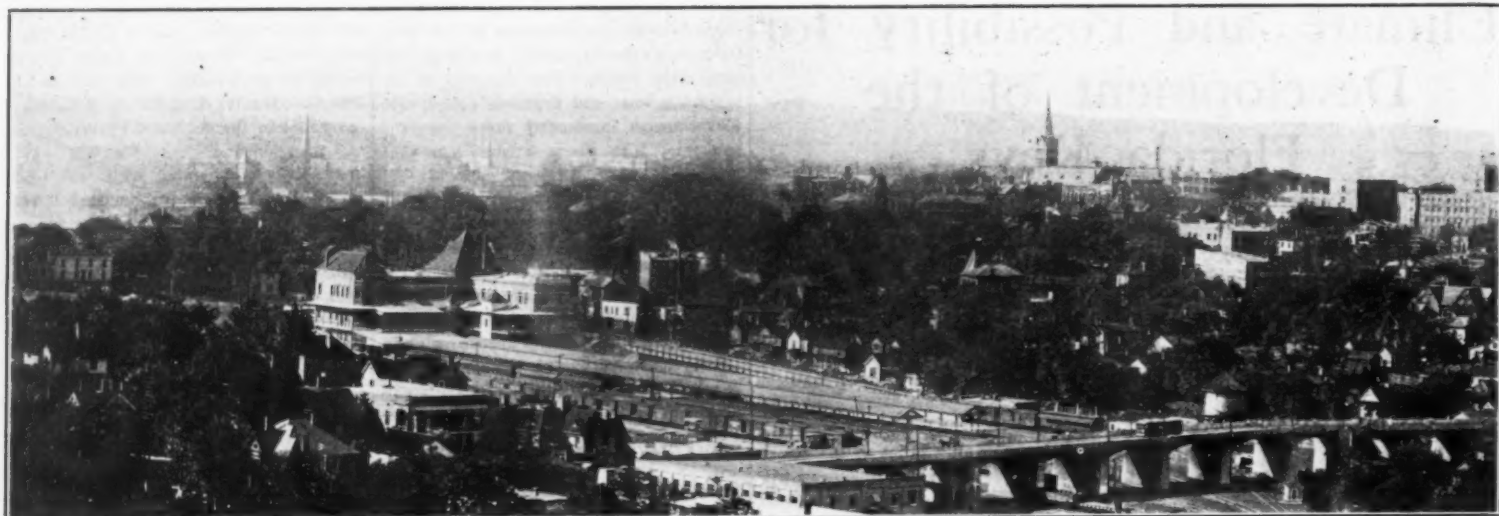
Other counties on the west coast of Florida are doing splendid work in the same line. The Tribune, for instance, calls attention to the fact that the adjoining counties of Pinellas and Pasco have voted \$540,000 in bonds for good-roads work. Thus three adjoining counties have recently voted bonds to the extent of \$1,540,000 to develop a modern system of highways. Adjacent counties are discussing similar work, and so West Florida will soon be noted as a region well supplied with good roads. Other parts of Florida, the middle counties of the State, as well as the east coast counties, have been voting bonds for road work, and those which have not yet done so on a large scale will doubtless be stimulated by what Hillsboro, Pinellas and Pasco counties are doing, and so Florida will become one of the most progressive States in the Union, for progress everywhere in these days must be measured by good roads and good streets. There can be no real progress, since civilization itself must rest on good roads, where impassable mud roads and dirty and unkempt streets are permitted to exist.

Referring to the action of the Seaboard in this advertisement of Hillsboro county, Mr. Edward Walker, manager of the Wall Realty & Investment Co. of Tampa, writes: "We think the advertisement a good one, and we are glad to see the railroads of Florida are at last doing a part of their duty in advertising Florida."

Great work is being done by some of the railroads in advertising Florida, but there is still room for others to follow their example.

Fort Worth Improvements.

Improvements at Fort Worth of an industrial or public character made during the past year or now under way represent more than \$12,000,000, according to figures compiled by Secretary R. O. McCormack of the Chamber of Commerce. The total includes \$3,800,000 for the plant of the Fort Worth Power & Light Co., \$1,300,000 for water-works, dam and other improvements, \$1,000,000 for stock-yards, etc., \$1,000,000 for roads in Tarrant county, \$953,924 for street paving and storm and sanitary sewers, \$750,000 for Cotton Belt terminals, \$500,000 for Northern Texas Traction Co.'s powerhouse, substation, double-tracking, etc., \$185,000 for public schools, and other sums ranging from \$300,000 to \$25,000.



VIEW OF KNOXVILLE FROM THE UNIVERSITY OF TENNESSEE.

HYDRO-ELECTRIC POTENTIALS.

The Advantages for Manufacturing Enjoyed by Knoxville.

[Special Cor. Manufacturers Record.]

Knoxville, Tenn., August 16.

The United States census of 1910 gives Knoxville between 30,000 and 40,000 population. The latest directory census and private estimates put the number of people in the city and suburbs at about 92,000. The fact is that the municipal limits are circumscribed, and whole sections of the real city lie outside the corporate lines, so that the directory estimate is probably nearer the truth of the matter than the actual Government count. But be that as it may, Knoxville is a city of considerable size, and, better yet, it is a city of such solid growth, such substantial accomplishment, such potentialities for future prosperity, as far outweigh mere numbers.

Knoxville lies in the fertile valley of the Tennessee, with the blue range of the Great Smoky Mountains rising in majesty on the eastern horizon and the Cumberlands towering on the west. It is the central point in a great hardwood section; is within easier reach of a great coal-mining region than any other Southern city of like size except Birmingham, and therefore enjoys the advantages of cheaper coal; is within the radius of the South's richest mineral section; is unexcelled as a railroad center and distributing point. Not only so. Knoxville has a wide-awake and progressive citizenship that has made it a manufacturing center wherein are made products each year worth from \$25,000,000 to \$30,000,000; a wholesale center which sells goods each year valued at many millions; a financial center whose banks carry deposits aggregating \$16,500,000.

In the matter of manufacture, that of hardwood products exceeds any other in value of output. The great forests of the surrounding country yield many millions of feet of timber annually to the factories located here, and here it is sawed into lumber and fabricated into numerous finished forms and thus hurried on to the markets of the country and the world. One of the leading phases of the hardwood manufacturing industry is that of mantel-making, and in this Knoxville holds easy primacy among Southern cities, possibly among all those of the world. Knoxville mantels go through Grand Rapids to Canadian markets, and through many other manufacturing centers to find other markets. In the making of other articles of interior trim and of furniture requiring hardwood Knoxville also holds a position of eminence among Southern cities.

In other lines of manufacture Knoxville has the Brookside Cotton Mills, employing 1200 to 1500 people; the Knoxville Woolen Mills, employing 1000 people, and said to be the biggest cashmere mills in the country; the William J. Oliver Manufacturing Co.'s foundry, machine and manufacturing plant, said to be the largest of its kind in the United States privately owned; the plant of the Knoxville Iron Co., which works 900 people. It has the machine shops of the Southern Railway, which cost \$2,000,000 and employ from 2000 to 3000 men. It has trunk and bag factories that turn out a larger product than those of like character anywhere else in the South, and it manufactures clothing to an extent that warrants it in challenging the supremacy of any other city south of Baltimore. It has 16 companies working the marble from its quarries into many finished products and employing many men. Complementing these and rounding out the list of manufacturing plants to a symmetrical whole are numerous other establishments of smaller individual capacity, but of even greater aggregate strength—concerns making flour and meal, candies, hosiery and underwear, drugs, packing-house products, shirts, overalls, ice cream, bakery products and scores of others. The capital invested in manufacturing in Knoxville is between \$15,000,000 and \$20,000,000, the number of people employed from 15,000 to 20,000, and the value of the annual output, as stated above, from \$25,000,000 to \$30,000,000.

The reasons operating to make Knoxville a manufacturing center of such important proportions are nearness to raw materials, cheap power—steam coal is laid down here for from \$1.15 to \$1.25 per ton—good labor and unexcelled facilities for distribution. The labor is for the most part native, is intelligent, industrious and free from the influences that make for industrial disturbances in so many other places. Wages are lower here than in places farther north, and yet, because of natural environments, the working people live better and are able to save more from their earnings.

There are influences, however, that must in the nature of things combine to make Knoxville of more importance yet in the manufacturing life of the country. Prominent among these are the hydro-electric potentialities that center here to a greater degree, perhaps, than anywhere else in the South. According to Government reports, there are greater water-power potentialities within a radius of 150 miles of Knoxville than exist in a like area in any other section of the country. The only important hydro-electric

development yet made within this radius is that of the Tennessee Power Co. on the Ocoee River. There 85,000 horse-power has been developed and is carried to Knoxville and a number of other points of consumption within easy reach. The Aluminum Company of America has acquired power rights on the Little Tennessee River, beginning some 40 miles south of here and running up the river for about 40 miles, and will build at least five dams, which will develop somewhere from 250,000 to 500,000 horse-power. Much of this current will be utilized by the owning plant in the manufacture of aluminum, but there will doubtless be a surplus for sale, and Knoxville will be its best market. The Tennessee River, which flows right by the limits of the city, and the French Broad and the Holston, which come together a short distance away to make the Tennessee, all offer power sites with immense aggregate possibilities, and the Little River, a few miles south, augments these possibilities by thousands. So that there will be no lack of cheap power in Knoxville.

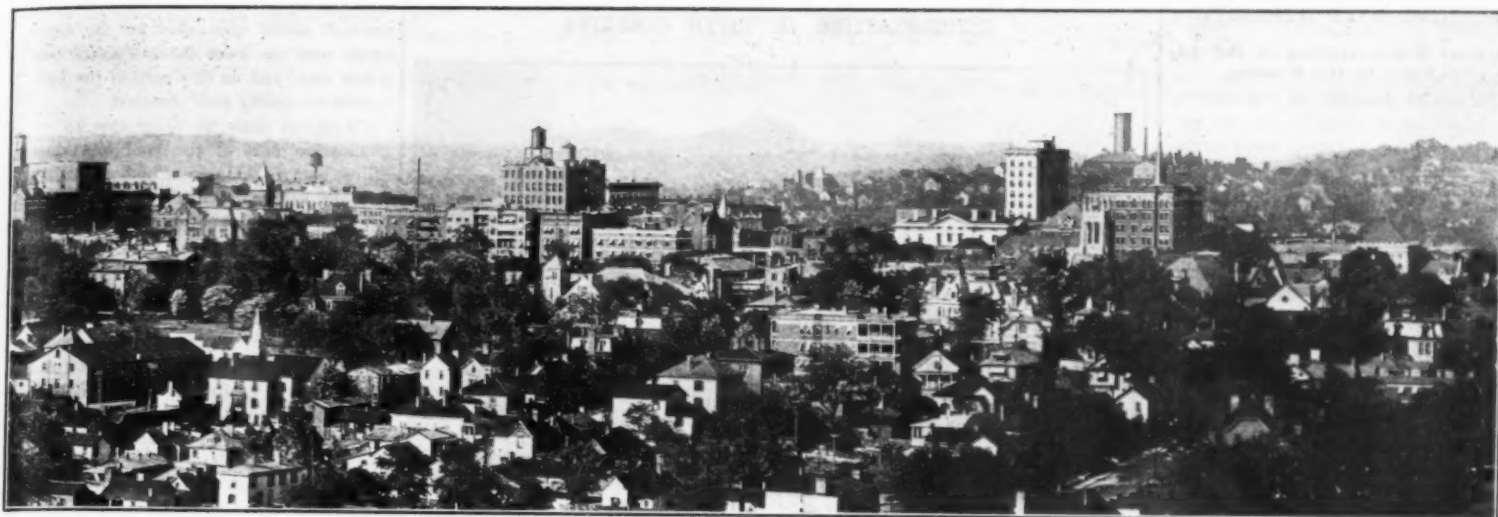
In raw materials easily and cheaply assembled here there is timber in great abundance, consisting of the oaks, poplar, pine, cherry, chestnut, walnut, locust, elm and other valuable kinds native to this section; there are immense coal deposits, from which the annual output is now from 5,000,000 to 6,000,000 tons; there are the famous marble quarries from which are taken large quantities of beautiful stone each year, that finds its way into many markets; there are the copper deposits of the Ducktown district, of which Knoxville is the trade headquarters; zinc ore is found all about, and even under the city, and is being mined in three different places a few miles outside its limits; cement rock, building stone of the best quality, the excellent Chilhowee slate; brick and pottery clays, barytes, manganese iron ore, iron pyrites and other minerals are found within easy reach of the city. Many of these are being brought to Knoxville, and more will be brought, to meet the power, the population, the banking facilities and the advantages of distribution furnished by the railway lines centering here, making this a manufacturing point of increasing power and importance. Then, too, Knoxville lies close to the cotton fields, and thus becomes a natural place of manufacture for a large amount of that staple. As stated above, cotton goods, underwear and hosiery are already made here to a large extent. These mills give employment to from 4000 to 5000 people.

As a wholesale town Knoxville claims the primacy of the entire country in proportion to population. There are 58 job-

bing houses, and they do a combined business of many millions a year. The leading articles sold are groceries, in which five establishments are engaged; shoes, with four exclusive wholesale houses; hardware, with five big concerns; dry goods and notions, clothing, flour and meal, packing-house products, drugs, marble products, candy, furniture, mantels, artificial stone and tile and numerous other articles of general use. More than 500 traveling men carry Knoxville sample cases and spread the Knoxville gospel of progress through the various sections of the country.

Another advantage of the Knoxville location—and it counts in the long run for more, possibly, than any other—is that it is in a section of great agricultural productivity. The famous Valley of the Tennessee, made up as it is of the valley of the Tennessee River proper, and those of the French Broad, the Holston, the Nolichucky, the Little Tennessee and numerous other tributaries of greater or less degree, is one of the most fertile in the entire country, and the rolling lands of the high plateaus which rise from it to the higher mountain altitudes are scarcely less fertile. Corn, wheat, oats, grasses, forage crops, potatoes, truck of various kinds, melons, apples, peaches, plums, grapes—all these produce in great abundance and all the best of their kind. It is a wonderfully fine stock section. Bluegrass grows wherever given the opportunity, and cattle fatten in the fields ready for the butcher's knife. Dairy herds thrive, and dairying is coming to bear a more and more important part in the economy of the husbandman. This entire section is well adapted to the raising of poultry, and chickens, turkeys, ducks and eggs are sent to market by the trainload, bringing back to the farmers hundreds of thousands of dollars. Hogs thrive on the nutritious grasses and need little feeding to bring them to well-fattened maturity. These things have a most salutary influence upon life in the city, not only making living conditions much better than they would be otherwise, by reason of filling the market with the best country produce at moderate prices, but they also add hundreds of thousands of dollars annually to the purchasing power of the farmers in Knoxville's retail trade territory, thus adding largely to the prosperity of local merchants and through them reaching those engaged in other lines of business.

Among the many attractions Knoxville offers those who are seeking homes are opportunities for educating their children not surpassed elsewhere. The public school system leads up to a high school whose diploma opens the doors of the best



VIEW OF KNOXVILLE FROM THE UNIVERSITY OF TENNESSEE.

colleges to its holder, and the University of Tennessee, one of the greatest of Southern schools, is located here, ready to carry the student along the high road to a finished education, either classical or technical. The Summer School of the South, one of the best schools for teachers to be found in the country, is open each summer at the University of Tennessee, having an average enrollment of more than 2000 pupils. The East Tennessee Female Institute, a fashionable and high-grade school for girls, and the Baker-Hemel preparatory school for boys are among the best known of the educational institutions of the State. A college for colored pupils, Lincoln Memorial Medical College and a number of business schools complete the tale of Knoxville's very efficient educational system.

Practically all the leading religious denominations are represented here by congregations and church edifices. Some of the buildings are handsome and costly, and add greatly to the beauty of the city. There are many very beautiful residences, with attractive lawns and stately trees. In fact, lying as it does on 10 hills, Knoxville's residence sections are not surpassed in beauty by those of any other city in the country. It is pre-eminently a city of beautiful, attractive and hospitable homes, a fact in which its people take just pride.

Knoxville lies 1000 feet above sea level, and enjoys the pure air of the mountains, while their towering heights shelter it from heavy winds and destructive storms. The average annual temperature is 57 degrees; summer, 74; winter, 40; spring, 57; autumn, 58. The average annual rainfall is 52 inches. The city has an excellent water system, municipally owned, from which is secured a bountiful supply of double-filtered water. It has many miles of well-paved streets, to which it is continually adding more miles. Excellent roads lead out into the country from all sides, and there are numerous delightful drives into surrounding scenes of picturesque loveliness.

The business men of Knoxville have recently formed themselves into the Board of Commerce, an organization that is actively engaged in putting the city to the front in every logical and proper way. A large four-story building, situated on the main business street, has been secured for a term of years, and in it the various manufacturing concerns of the city are invited to make exhibits of their products. It has been open but a short time, yet about 50 concerns have taken advantage of the opportunity offered and have installed their exhibits. This will make a permanent exhibition of Knoxville-made products, open at all times throughout the

year, and giving the visitor in a very short time a comprehensive idea of the manufacturing strength of the city. A cafe is maintained, where a noonday lunch is furnished those who wish to patronize it, and while it is in no sense a social club, it nevertheless furnishes the opportunity for the business men of the city to meet for a short time each day for the exchange of ideas looking to the advancement of Knoxville. An active, intelligent secretary attends to the actual work of the organization, and its influence is beginning to be felt in many ways. Taken altogether, it seems to me this Board of Commerce is one of the most effective commercial organizations with which I have come in contact in the entire South.

Knoxville has two trunk-line railroads, the Southern and the Louisville & Nashville, but these two, with their branches, radiate from the city in 13 different directions, giving it excellent facilities for reaching all parts of the country. Just now there is considerable agitation of the question of building the Tennessee Central into Knoxville from Hardiman, joining it with the Oliver road from Knoxville to Sevierville, and then extending it at both ends until it makes a road of trunk line proportions. It will be a matter of time only until such a project is carried out, opening up some virgin territory to Knoxville trade toward the South and carrying into markets not now directly reached to the west. GEO. BYRNE.

VAST FRUIT FREIGHT TRAFFIC.

Sixteen Thousand Carloads of Citrus Fruit.

During the season of 1912-1913 the Atlantic Coast Line, according to a statement recently issued by the company, handled out of Florida 16,500 carloads, or 5,459,000 boxes, of citrus fruit. The magnitude of the industry and its importance to the railroads is indicated in this shipment by one road of 16,500 carloads of oranges and grapefruit. In the same pamphlet from which these figures are taken a statement is made in connection with an unusually fine illustration of a celery field in Florida that from 1000 to 1500 carloads of celery are annually shipped from that one point.

The State of Florida, and, indeed, much of the territory tributary to the Atlantic Coast Line, is every year becoming more and more a vast garden and fruit-growing area, furnishing an enormous amount of high-priced freight. Indeed, no other freight pays so high a figure as that of this early trucking and fruit-growing industry. But this territory is not by any means limited to the production of fruits

and vegetables, great as is the quantity of these grown.

The Coast Line's pamphlet is entitled "The Nation's Garden Spot," and is beautifully illustrated with views of fruit, trucking and general agricultural interest along its line. In this pamphlet is shown an illustration of a pile of corn amounting to 2283½ bushels grown on one acre by Jerry Moore, a 15-year-old boy in South Carolina, who demonstrated what could be done in corn production in that State. There are other pictures of great corn fields, and peeping here and there through the corn, which is twice as high as the people, are men, women and children, the contrast in size and height enabling one to get a better idea of the immense stalks that are produced and the great yield of corn that is possible. There are vast tomato fields in view and cabbage fields, for at one point near Charleston is the largest cabbage-growing section in the United States, and that probably means the largest in the world. No one can study these pictures, which appeal to the eye while telling the story of diversified agricultural crops, without having a hankering develop in his brain to get away from the cold of Northern and Western regions, where people freeze to death much of the winter, or from the burning heat of the far West, which recently, as often happens, has almost destroyed the crops of much of Kansas, and get to a region with an equitable climate winter and summer, and where fertile soil and genial sun and an abundance of rain make possible such conditions of living as are indicated in this story of "The Nation's Garden Spot" issued through the passenger traffic department, of which Mr. W. K. Craig is the manager.

Carpenter School No. 2, Natchez.

As a memorial to his family, N. L. Carpenter of New York is erecting at Natchez, Miss., a school building to be known as Carpenter Memorial School No. 2. This structure, it is said, will be one of the best arranged and equipped schools in the South. The building will contain 10 classrooms for regular school work, with a cloakroom for each. In the basement will be a swimming pool, showers and lockers for boys and girls, toilets, domestic science department, storeroom, manual training department, boiler and fuel rooms. The kindergarten department, with cloakroom, two rooms for the primary department, gymnasium, office, library, reference and reading rooms will be located on the first floor. It is stated that the library will be sufficiently large to serve as a public library for the city. There will be seven classrooms, with

cloakrooms for each, and two toilets on the second floor. The building will be well lighted and provided with ample corridor space and two stairways leading from the basement to the second floor. It will have four entrances—two from the street and two from the playgrounds in the rear. The interior finish will be first-class, and each department will be equipped with furniture and fixtures of the most modern design. The library will be equipped with stacks, bookcases and other furniture, and will be stocked with carefully selected books. In its construction the exterior will be faced with gray vitreous brick, trimmed with stone and terra-cotta. The building was designed by R. H. Hunt of Chattanooga, and is being erected by R. E. Bost of Natchez. It will cost approximately \$100,000.

For Alabama.

A striking manifestation of enterprise in behalf of a section in which they are financially interested is given in a booklet, "Alabama, Its Industries and Resources," issued by Morris Bros. of New York and Philadelphia. In 32 pages of the booklet, which is artistic from cover to cover, are reproduced, with illustrations, the matter bearing upon Alabama, Birmingham and Tuscaloosa which appeared in "The South: The Nation's Greatest Asset," published by the MANUFACTURERS RECORD last spring. To that matter is added a group of halftones illustrating the operations of the Birmingham, Ensley & Bessemer Railroad and industries of its tributary territory.

A Chance to Investigate.

In the reduced rates for transportation to Chattanooga and the other Southern battlefields in connection with the national encampment of the Grand Army of the Republic, to be held at Chattanooga in October, is an opportunity for home-seekers and investors from the North and West to make a personal inspection of a region in the South appealing to them in many directions. That is a fact which the manufacturers and other business men of Chattanooga appreciate, and which is the inspiration of their efforts to give as wide publicity as possible to the encampment.

To Build Big Mill.

The Truitt-Cramer-Dill Company, Suffolk, Va., will build a mill with a daily capacity of 60,000 feet of lumber, and is now considering plans for construction. This plant will manufacture lumber from timber to be shipped to Suffolk from the company's timber land in North Carolina, where it owns 120,000 acres near Wilmington.

DITCHING WITH DYNAMITE.

Practical Demonstration of the Advantages in the Process.

The use of dynamite in tree-planting and subsoiling is primarily for the purpose of creating increased water-storing capacity in the soil, although it at the same time makes it easier for the roots to penetrate to hitherto unavailable store-houses of plant food. This water-storing effect has led to the suggestion that the use of dynamite in breaking up the sub-soil of regions in which are the headwaters of many streams will conserve the rainfall and prevent the rapid run-off of water carrying valuable top soil with it. Complementary to this phase of conservation is the reclamation of wet lands by drainage. Here, too, dynamite has its part to play. The accompanying illustrations show results of ditching by dynamite on the farm near Union, S. C., of Allen Nicholson, editor of the *Progress of Union*, who describes his experiment as follows:

"Ditching with dynamite is 'the thing' when quick work is to be done, labor is scarce, economy is considered and all-around benefits are sought.

"This statement is based on actual experience, for, having a piece of valuable bottom land which last summer could not be cultivated at all because frequent rains made it so miry that no plowing could be done, caused the writer to seek a way by which such valuable land would not be allowed to be idle another season, and yet the work be done as cheaply as possible.

"The trouble with the bottoms was that an old creek ran through it in a zigzag serpentine fashion, which resulted in the water jamming the banks and washing sluices through the land whenever there were heavy rains, with the result that the land was badly damaged, and there was no certainty of crops being raised, even if planted.

"To change conditions and make the 12 or 15 acres in the bottoms produce corn enough for the farm, it was decided to make an entirely new creek bed, following the edge of the bottoms and contour of the hills in a gradual bend. To do this required a ditch 1550 feet long, and it was decided to have this from 3 to 4 feet deep and 12 feet wide. As labor was very scarce, high dynamite was sought as a solution of the problem, and by means of it the ditch was made according to foregoing specifications at a cost of \$198.65 for dynamite and fuses and \$8 for labor.

"To go into detail, the ditch had a fall in its entire length of 12 feet. Along its whole course two rows of dynamite were placed in holes 3 feet apart, being made so as not to be directly opposite each other, and by this over-lapping method to clear the dirt out of the ditch more effectually, for the dynamite throws most of the dirt clear of the ditch, scatters it evenly over the surrounding ground, and but little falls back into the ditch. Of this about 900 feet were through blue clay, which was so miry that horses or mules would sink to their bellies. In this section holes were placed 3 feet apart on each row and 2½ feet deep, being made vertically instead of at an angle with the crowbar. Into each hole one and one-half sticks of dynamite were placed, and from 25 to 30 holes were shot off at one time by the use of a battery to which was connected 300 feet of leading wire.

"In another section of 550 feet the land was a dry sandy loam, and in this only one stick, weighing half a pound, was placed to each hole, which were 3 feet apart and the same depth, and 50 shot off at a time. About 100 feet was through

DITCH-BLASTING IN SOUTH CAROLINA.



DYNAMITED DITCH RUNNING THROUGH BOTTOMS THAT HAD FOR YEARS BEEN TOO BOGGY TO WORK, BUT NOW SO DRY THAT CORN IS GROWING ALMOST UP TO THE DITCH'S EDGE.



DITCH DYNAMITED IN MIRY BLUE CLAY WHERE NO ANIMAL COULD STAND, MUCH LESS WORK.



DYNAMITED DITCH WIDENED AND DEEPENED BY FLOW OF STREAM.



DITCH DYNAMITED THROUGH A SEAM OF ROCK.

land seamed with rock, and here one and one-half sticks were used to the hole, which were the same distance apart, but 4 feet deep, and on this section the best immediate results were observed.

"With the hope of being able to do grading on part of the land and thus utilize teams that were standing idle at the time, sufficient dynamite for the whole line of ditching was not purchased at first, and this was a mistake, for when the grading was attempted it was found that the water was not over 10 inches below the surface of the ground, and the scraper could not get up the mud well, so more dynamite had to be ordered, delaying the work. If the entire line had been shot off as rapidly as possible and the water turned in, it would have washed the loose dirt out immediately. As it was, there were several heavy rains before the dynamite came which settled the dirt to a certain extent, but nevertheless at the time the water was turned in the ditch it was from 8 to 14 feet wide and 3 to 5 feet deep, but within the past few months the water has washed it out until it is now from 4 to 6 feet deep and 12 to 16 feet wide, and this without employing any physical labor except two hands, who at odd times have put in about a week each at an expense of, say, \$8 or \$9, to even off the banks and bends.

"The advantages of ditching with dynamite are that it can be done so much more rapidly than by hand, even if a good force of labor can be at work, which is proof enough to the writer that dynamite is the most satisfactory way to ditch from any point you look at it, and that taking in consideration everything, anyone who will compare the figures given with the cost of ditching in their community will see that it is not only more satisfactory in results, but in actual saving of money. If full time had been put in on the ditch in question, my overseer, with one good hand, could have done it in three days, and if some of the shots had not misfired because of being improperly connected through inexperience, less time would have been consumed.

"Besides the rapidity of the work and the saving of labor, the effects of the dynamite was splendid for the land, because it loosened the soil both below and above, causing the land to drain out quickly on top, while the water in the creek keeps washing it deeper than had it been done with pick and shovel."

Miami.

In its seventeenth anniversary issue the *Daily Metropolis* of Miami, Fla., presents some interesting facts about the growth of that flourishing community. In 1896 there were but eight voters residing within the territory which in August of that year was incorporated as Miami. Now within its territory, 6 miles long and 3 miles wide, where the Miami River empties into Bay Biscayne, there are 14,135 inhabitants. The city has two ice plants in operation, a third under construction and a fourth planned for this fall; six banks, with combined deposits of nearly \$4,000,000; the main offices of four dredging companies and many business and residential structures of concrete construction. In the past year building improvements representing \$4,000,000 were undertaken or planned.

Factories Wanted.

M. E. Chattin of Winchester, Tenn., writes to the *MANUFACTURERS RECORD*: "We have an excellent city for knitting and hosiery mills, canning factories, chair and furniture factories, a laundry, packing, wholesale and commission houses."

NATURAL GAS FOR LOUISVILLE.

To Be Piped More Than 200 Miles From West Virginia.

[Special Cor. Manufacturers Record.]

Louisville, Ky., August 16.

The Kentucky Pipe Line Co., organized some months ago in connection with the Louisville Gas & Electric Co., which is now operating all of the electric and gas properties of the city, has set on foot the construction of a pipe line over 200 miles long from the West Virginia gas wells to Louisville.

The company, which is capitalized at \$2,000,000, with an authorized bond issue of \$3,000,000, let a contract to the Pittsburgh Construction & Engineering Co. of Pittsburgh, Pa., for the work, and the contractors will furnish all of the material and labor for the job. They have already started operations, and it is believed that if the weather is favorable the task will be completed in December or January.

The Louisville Gas & Electric Co. has contracted for gas with the Standard Oil Co., and is assured a supply from the West Virginia gas wells which will prove sufficient to supply the city for many years, and probably generations, to come. A feature of the contract with the city of Louisville, under the provisions of which the company was permitted to merge the local public utilities, was that the gas line should not be used for any other community until the maximum requirements of Louisville had been taken care of.

This has resulted in an interesting deviation from the usual plan in the construction of the pipe line. Instead of following the usual courses, and passing through various cities on its way to Louisville, the pipe line is being run almost as the crow flies, and in this way a considerable distance will be cut off.

Owing to the fact that part of the territory through which the pipe line passes is exceedingly rough, including the mountainous section of West Virginia and Kentucky, it is probable that some delays in proceeding with the work will be encountered. For this reason officers of the companies interested have not fixed a definite time for the completion of the work, but have indicated that it is their hope to give Louisville natural gas, which also means cheaper gas, involving a reduction in rate from 75 to 35 cents, by the beginning of 1914.

The contractors are charged with the task of providing the occasional regulating stations which are needed to reduce the pressure of the gas. The equipment required for this purpose is inconsequential, however, and officers of the Kentucky Pipe Line Co. stated that the only material needed was a small number of valves. The regulating stations will not involve expense of moment, it was declared, practically all of the \$3,000,000 spent in the construction of the line being for labor and pipe. The pipe is all 12-inch stuff, and an immense tonnage of it will be used. It has been purchased in Pittsburgh, and will be delivered at various points along the route of the line as needed.

Several gangs of men are already at work, ground being broken simultaneously at a point near Paintsville, Ky., and at Frankfort, Ky. Each crew is working westward, the men moving from Eastern Kentucky to Frankfort, while the construction gangs starting at the latter city will push on to Louisville, a distance of 50 miles. About 100 men are at present employed, though it is planned by officers of the contracting company to add additional men as the work progresses.

The Louisville Gas & Electric Co. will build, independently of the Kentucky Pipe

Line Co., a belt line around the city of Louisville for the purpose of distributing the gas to the various mains. A regulating station will also be built in the eastern part of the city, but in the words of Donald McDonald, vice-president and general manager, a chicken-coop will hold all the equipment which will be required for it, as the operation of reducing gas pressure is exceedingly simple.

Gen. George H. Harries, the representative of the H. M. Bylesby & Co. interests, is president of the Louisville Gas & Electric Co., which, as noted above, has taken over all of the lighting and gas properties of the city, including the Louisville Gas Co., Louisville Lighting Co., Kentucky Heating Co., Kentucky Electric Co., Geo. G. Fetter Light, Heat & Power Co. and Campbell Electric Co. Donald McDonald, who was president of the Kentucky Heating Co., is vice-president and general manager of the new company, which is capitalized at \$23,000,000. John G. Pew of Pittsburgh is president of the Kentucky Pipe Line Co., which was formed for the specific purpose of constructing and operating the line between the gas wells and Louisville.

G. D. CRAIN, JR.

The Birmingham Iron Market.

[Special Cor. Manufacturers Record.]

Birmingham, Ala., August 16.

A disposition to make liberal provision for future requirements has developed in all quarters of the foundry pig-iron market supplied by local furnaces, and from the information obtainable the producing interests have succeeded in fully maintaining an \$11 Birmingham basis for No. 2 foundry, or the most recent advance. Spot deliveries are probably in stronger demand than at any time since early in the year, and owing to the condition of order books, when compared with the rate of production, certain concerns are asking a premium of 25 cents per ton on all tonnage entered for immediate shipment. Forwardings from furnace yards in the week were substantially larger than the output for that time, while the new business placed since last report involves an aggregate very close to 50,000 tons. This tonnage is for delivery within the remainder of the year, and it is not understood that quotations on first-quarter deliveries have yet been elicited. Of the recent transactions the most important involved 10,000 tons of assorted grades for shipment in the last quarter. In addition to this, four lots of 1000 tons each were entered for the last quarter, and a single lot of 4000 tons of No. 4 foundry was entered for delivery commencing immediately. This last was sold at \$10.25 per ton at Birmingham, and the same figures, or a differential of 25 cents per ton on the price asked for No. 3 foundry, is understood to have been paid in other transactions involving assorted grades. Small lots of mottled recently sold at \$10 per ton Birmingham, and it is not understood that any tonnage of forge can be had at the same figures. High silicon grades continue to bring premiums of 50 cents to \$1 per ton over the No. 2 foundry price, and one lot of 600 tons of high silicon, high manganese, has just been sold at \$12.25 per ton at Birmingham. The bulk of recent sales involved Nos. 2 foundry and 2 soft, with a straight price of \$11 per ton at Birmingham the consideration. An \$11.25 per ton price was paid in several cases for lots of less than 500 tons where delivery was to be made promptly, but, except for a preference in brands, the \$11 basis ruled, and those figures undoubtedly correctly represent the market for any delivery in the remainder of the year.

Against the present rate of production at least three of the leading interests have

practically disposed of their make in the next three months, and a smaller concern has very little tonnage to offer for delivery in the fourth quarter. Stock accumulations and the tonnage in warrant yards is, of course, to be disposed of, and against such holdings sales will no doubt be made rather than against the make in the first quarter of next year. However, the scarcity of labor and the pronounced shortage of railroad cars has proven a serious handicap in moving the tonnage from storage yards, and in the majority of cases the producers are reluctant in committing themselves for prompt shipments other than out of the daily make. It is understood that plans are under consideration for the blowing in of one additional stack on foundry grades, but it is not thought that such action will be taken until the improvement in market conditions is more pronounced. In the meantime those furnaces scheduled to go out of blast in the last half of July continue in operation, and the operators are concerning themselves seriously in the matter of sufficient ore supply to warrant operations without interruption.

Conditions relative to the charcoal-iron market are practically the same as last reported, and no additional tonnage of basic has been placed with the local interests.

For delivery in the remainder of the year the schedule of prices below is quoted for the several grades per gross ton f. o. b. cars at Birmingham district furnaces:

No. 1 foundry, \$11.50.
No. 2 foundry, \$11.
No. 3 foundry, \$10.50.
No. 4 foundry, \$10.
Gray forge, \$10.
Mottled, \$9.75.
Standard basic, \$11.
Off basic, \$10.50.

Standard warm-blast charcoal iron, \$25. Manufacturers of cast-iron water pipe do not report any material improvement in the outlook for new business, while cast-iron soil-pipe producers have of necessity reduced the production. Quotations for the first mentioned are being maintained about as last revised, but the fact remains that no contracts of importance have recently been awarded, and that the extent to which shading would be done is not definitely known.

Quotations on class "B," or water pipe, is quotable as follows per net ton f. o. b. cars at Birmingham, viz.: Four-inch, \$22; six-inch and eight-inch, \$20.50, with an average of \$20 per ton for the larger sizes. Class "A," or gas pipe, is quoted at an advance of \$1 per ton over that asked for class "B."

Dealers in old material are adding to their holding in anticipation of an advance in the price for the several grades to conform more closely to the prices being asked for low-grade pig-iron, but are without encouragement in the shape of a larger volume of new business. Heavy machinery continues principally in demand, with wrought and steel grades next in importance. Prices for the last grades referred to have suffered with the further decline in quotations on finished products, and the mills are generally disposed to look for "bargain" lots.

Standard 72-hour foundry coke is quotable at \$3.75 to \$4 per net ton at Birmingham ovens, with the first figure the minimum consideration for contract requirements. Furnace coke is easier comparatively, and stock piles at furnace operations have increased.

The market for steam coal is very quiet, with prices being maintained around the level reached in the last decline.

Mobile's Chamber of Commerce Reorganized.

[Special Cor. Manufacturers Record.]

Mobile, Ala., August 16.

Mobile's Chamber of Commerce has been reorganized and placed in the hands of Dan Farnsworth as business manager. Farnsworth, a native of East Tennessee, is the man who made a success in the reorganization and welding together of the various elements which now comprise the Chicago Association of Commerce, one of the most powerful and business like commercial organizations there is in the country today. He had been out of commercial organization work for some years, for a while a resident of Atlanta and owner of a couple of well-developed farms between Augusta and Atlanta. He took hold of the Chicago organization when it had 93 members and an insignificant annual income. During the four or five years in which he had the management of the organization directly in charge he built up a membership of over 5000, and when he left to give his entire time to his own affairs the annual income of the association was more than \$250,000.

The Mobile Chamber of Commerce feels particularly fortunate in having been able to secure the services of Mr. Farnsworth, who comes here in preference to a number of other places which had made him offers as soon as it was found that his services could be secured for this work.

Mr. Farnsworth has been in Mobile for about a week, and at a public meeting recently he announced his platform, and in so doing aroused the interests of the large number of members who were in attendance. He stated that he proposed to have a strictly business administration, and that he would attempt to secure the co-operation of every man interested in Mobile's welfare. He proposes to separate the activities of the Chamber into five general divisions or bureaus. First, industries; second, trade and commerce; third, traffic and transportation; fourth, publicity; fifth, civic affairs.

At the meeting steps were taken to form a ways and means committee, which will undertake in a very comprehensive way the work of securing the co-operation of every line of business activity which Mobile contains.

It is the expectation that entirely tangible and practical results will follow the efforts now being made, and that Mobile will be in better position than ever before to utilize the various elements which furnish the possibilities for the development here of a really important ocean port, industrial center and commercial metropolis.

Turning Resources Into Cash.

Board of Trade,

North Wilkesboro, N. C., Aug. 15.

Editor Manufacturers Record:

In all the great varieties of North Carolina's natural resources the wild blackberry crop in Wilkes county is making for itself a place among the leaders. This is a berry that "takes" the so-called old worn-out fields, roadsides, fence corners, creek banks, etc., and thrives, defying man, beast and weather conditions, a crop every year. The 1913 crop, just gathered, was cut short by the drought, but in spite of the continued weeks of dry weather three North Wilkesboro dealers handled 956,090 cans, worth approximately \$36,920. This is a net gain to the county, and the quality of these berries is second to none, not even the cultivated variety surpassing it. They are good-sized, sweet and of fine flavor. Next year the canners will pay \$1.50 per bushel, which is 50 per cent. more than was paid

by most of the dealers the past season. It would be hard to tell what an average crop would bring if they were all saved, for three-fourths of these berries are never picked, but allowed to dry up or rot on the briars. One man, Mr. A. Brown of Mulberry, Wilkes county, says an old field which he thought was worn out was abandoned a few years ago, thinking it was of no more use, but blackberry briars sprung up voluntarily and now brings him in more cash than any cultivated crop he ever gathered from it while it was under cultivation, and Wilkes is well known as a first-rate agricultural county.

Red Limbertwig apples grown in the thermal belt on the Brushy Mountain in 1912 were eaten August 14, 1913, and they were not kept on cold storage, either. The new crop is taking on color and the growers are getting \$2.50 per box (one bushel) for their early fruit through the United Fruit Growers' Association.

H. W. HORTON, Secretary.

A \$500,000 MILLING PLANT.

St. Louis Company Awards Contract for Flour Mill, Grain Elevator, Warehouse, Etc.

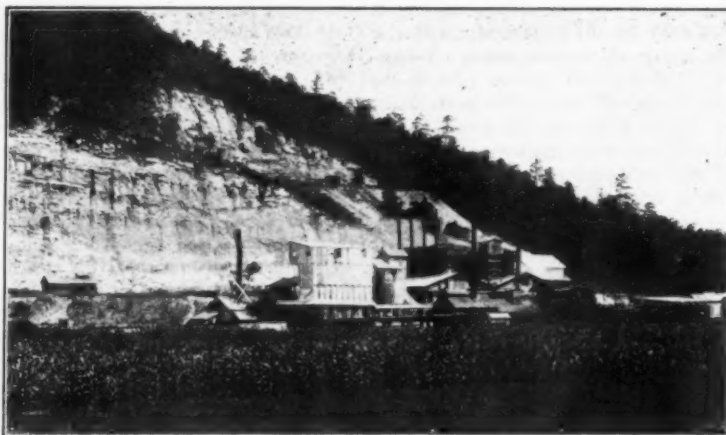
The Stanard-Tilton Milling Co. of St. Louis, which has been planning to build a mill at Dallas, Tex., has awarded contract to the Macdonald Engineering Co. of Chicago for the construction of a Dallas plant. The engineering company writes to the MANUFACTURERS RECORD as follows: "The plant is to represent an investment of more than \$500,000. It will be built of reinforced concrete, and is expected to be completed by January. It will comprise the following: Mill with daily capacity of 2500 barrels of flour; grain elevator of 500,000 bushels capacity, with complete equipment for 25 cars daily; power-house to be equipped with internal combustion engines of 500 horse-power; warehouse with 300,000 square feet of floor space; office building; storage tanks; transfer tables. Plans and specifications have been prepared and construction will at once begin. The Macdonald Engineering Co. also wires the MANUFACTURERS RECORD as follows: "Mill 50x200 feet, six stories; warehouse 40 feet wide on three sides of mill, length 480 feet, one story high; power-house 30x70 feet, one story; elevator 41x170 feet, 100 feet high; power about 1000 horse-power; complete equipment and machinery cost \$125,000."

For a Southern Plant.

A Northern manufacturer of iron work, who contemplates locating a similar plant in the South, writes to the MANUFACTURERS RECORD as follows:

"I am considering, in a preliminary way, the establishment of a small manufacturing plant in a branch of the iron business with which I have had large experience, to be located at some point in the South should it develop that sufficient inducements are offered to warrant the undertaking. By inducements I refer particularly to the question of capital, as I would expect to furnish about \$3000, which would purchase our machinery, and it would then be necessary for a given community to provide a working capital of from \$3000 to \$5000. My plan would be to rent a shop, which must have siding facilities, and make no investment in real estate until the business had been thoroughly established. I would be inclined to consider favorably the city of Norfolk or Newport News, as it will be of material advantage to be able to reach the Baltimore market economically."

The writer of the foregoing will be forwarded any correspondence addressed "Iron Plant," care of the MANUFACTURERS RECORD.



LIMESTONE QUARRY AND PLANT AT LAGARDE, ALA.

Lagarde Lime and Crushed Stone Plant.

For 15 years the Lagarde Lime & Stone Co. of Anniston, Ala., has been working into the west end of Colvin Mountain, in Etowah county, and in that time has developed the main quarry face to the height of 200 feet at the apex, with a length of a little more than 1000 feet from end to end. Besides this, it has developed an upper quarry, the floor of which is 175 feet above the lower quarry floor, and a 100-foot face is being worked there. The workings and plant are shown in the accompanying illustration.

All of the stone produced from these quarries enters into the manufacture of crushed limestone for macadam, concrete, furnace fluxing or is manufactured into lime and sold as quicklime or hydrated lime. The plant is located on a spur of the Louisville & Nashville Railway at Lagarde station. The company maintains a commissary store to supply its employees with their needs, and furnishes houses for the workmen. The site was selected for the opportunity it offered in the way of developing a complete quarry equipment. It has a supply of limestone, the volume of which measures into the millions of tons. The character of the rock is of uniform analysis, high in calcium, low in magnesium and other impurities. The stone itself is of dense formation and texture, and weighs 170 pounds per cubic foot. When broken it fractures with a clean sharp edge, making it especially desirable for concrete aggregate.

Calhoun county, Alabama, has built several miles of pikes in which this stone was used. The stone binds to form a hard smooth wearing surface, making excellent macadam roads. Farmers are very enthusiastic over the character of the road that they have, and are extending the system of pikes as rapidly as the funds are available for the purpose, with the result that farm values have greatly increased and more land has been put under cultivation in the past few years than any period previously in the history of the State.

Lagarde limestone has been used extensively in street paving work of a number of cities, including Birmingham, Talladega, Anniston, Atlanta, Pensacola, Mobile, New Orleans and others. This was for asphalt pavements, where a clean, well-sized stone was required. For concrete work this stone has been used in a number of important structures, and has been found to make a highly satisfactory aggregate in the concrete mixture.

The crushing plant shown in the illustration consists of three crushers, with full sets of screens to make any dimension of stone wanted, and ample storage capacity is allowed to hold the stone after it has been sized. Five sizes of stone can be made with the equipment, besides facilities for loading broken rock used for

heavy bridge or rip-rap work. The lime plant consists of eight steel shell upright kilns. The fuel used is producer gas. This plant was one of the first in the United States to install gas producers, and the process of gas burning in lime practice has been so perfected that it is giving excellent results. Gas-burned lime, when properly applied, is believed the nearest to an all-wood-burned lime that can be made.

Contractors mix the hydrated with the sand dry and add the water, allowing the putty to stand over night before using. By the use of this material lime can be conveniently handled; it is not so hard to work, and there is an estimated saving of five cents per barrel in the slacking, besides doing away with barrels, lime boxes and slacking boxes on the work. Waste is also eliminated with hydrated lime, as it can be used at any time, and the packages can be stacked in a dry warehouse, where the material will keep indefinitely. Besides using hydrated lime for plastering with good results, contractors who have carefully watched the results say that it is advantageous for laying bricks.

Many architects and builders are now specifying Portland cement mortars for brick work. The contractor finds that he must add some lime to make a smooth working mortar. The Portland cement will set so quickly that the bricklayer hardly has time to lay out his putty and set the brick before the mortar stiffens up. Hydrated lime has been found to be just the thing as an addition to the Portland cement mixture, for it retards the setting of the cement and at the same time makes a smooth-working mortar.

The Lagarde Lime & Stone Co. has pushed the sale of this product, and has developed the trade to the extent of several thousand barrels per month on hydrated lime alone, as well as quicklime in both coopeage and bulk, and ships many mixed cars. The company issues monthly bulletins on "Facts About Lime," which give concise and complete up-to-date information on lime and its uses. The main office of the company is at Anniston, Ala. The plant is at Lagarde, 23 miles north of the city, so that close touch with the plant operations is maintained.

The officers of the company are: President, Harry Trexler, Allentown, Pa.; vice-president, E. M. Young, Allentown, Pa.; vice-president, Bernard L. McNulty, Anniston, Ala.; treasurer, Alonzo F. Walter, Allentown, Pa.; secretary, George G. Sykes, Allentown, Pa.

Paving Brick From Furnace Slag.

An extensive industry is being developed in the north of England, at Middlesbrough, based upon the utilization of blast-furnace slag. Several companies are now engaged in the work, and are appar-

ently very successful both as to results obtained from the brick as well as commercially. The method pursued in the manufacture of these brick is as follows, as described by Commercial Agent Frank G. Bolles:

"A suitable manufacturing site is selected near the blast furnaces which are to supply the slag, this plant being connected by an industrial railway upon which the molten slag is carried from the furnace to the molding machine. The latter consists of a metal wheel which may be of any suitable diameter, but which in the case examined was approximately 30 feet, this wheel being supported upon a vertical shaft. The spokes of the wheel are made of round rods, and the construction of the wheel itself is quite similar to the wire-spoked wheel used for vehicles. The metal rim upon which the molds are bolted is approximately three-fourths inch thick and nine inches wide. In the plant examined this wheel carried 120 molds nine inches long, three and one-half inches thick and four inches deep, which is the standard size for paving brick. A variety of other molds are used, but the bulk of the work is of the paving-brick size. The molds are made of two pieces, the front end or right side being an arm in one piece which is bolted to the rim of the wheel, while the left side, back end, and bottom is another piece. The latter is hinged to the part which is secured to the rim of the wheel and held for casting purposes by a catch on the front end of the stationary piece. On the right side of the mold is cast a lip which assists the operator in more readily striking the mold when pouring the hot slag. Before casting the molds are dusted with a powder, the appearance of which would indicate it to be Portland or other cement.

"The car which carries the slag is of plate steel with a fire-brick lining, the top being covered over with a removable cap, in the center of which is a hole approximately 18 inches in diameter, through which the slag is poured when the car is filled at the furnace. At the bottom of this car is a tap similar to those used upon blast furnaces. The car of molten slag is run alongside the wheel, the trough to the tap extending over the molds; the clay plug in the tap is knocked out and the molten slag runs into the mold. As soon as it is filled an operator, by means of a hand wheel mounted upon a sheet-steel heat deflector and connected through rods and miter gears to the center of the molding wheel, turns the latter so that the next mold comes under the flow of hot slag, and so on until all the molds are filled. By the time that the wheel has made a quarter revolution the cast bricks have sufficiently cooled so that they may be dropped out of the molds by knocking off the catch which holds the bottom in place.

"As soon as they have dropped to the ground they are taken by laborers to the annealing furnaces, into which they are thrown in a promiscuous heap. These furnaces, of which there were six in the plant examined, held approximately 1100 brick at one charge. The heat retained in the brick when they are thrown into the furnace, together with a very small amount of fuel, again brings them to a cherry red, and as soon as the furnace has been filled it is closed and allowed to cool gradually, 24 hours usually being required before the bricks are removed."

"The capacity of the slag car is approximately three and one-half tons, from which 360 to 400 paving bricks are made. The bricks, when cleaned up, having all of the rough corners knocked off which have been left in the process of casting, weigh about 14 pounds each. These bricks are proving very efficient for street paving.

SUCCESS IN WESTERN ARKANSAS.

Cotton, Corn and Contentment Among the Watchwords.

Business Men's Club,
Fort Smith, Ark., August 12.

Editor Manufacturers Record:

With tariff tinkering at Washington, with the McAdoo offer of millions to move the coming crops of the country, with politics governing our would-be statesmen and with war in the Orient and a revolution in Mexico, one would think there was no time for agricultural and industrial activities. But way down here in the Southwest section of this great country of ours we are too busy to get away with our unprecedented cotton and corn crop to care much for outside attractions. Never in the history of Western Arkansas has a better crop prospect been at hand. Cotton has had no visit from brother "weevil." The stalk is healthy and heavily fruited. The season has been splendid, rains when needed and weather conditions good. This section of Arkansas and Eastern Oklahoma has had nothing to prevent one of the biggest harvests in our history. Corn has been made since August 1, cotton is rapidly opening, and promises a big yield. Corn will average 50 bushels to the acre. Our farmers harvested a good oat crop, fine Irish potatoes, shipped hundreds of earloads of strawberries, Irish potatoes, peaches, melons and garden truck. The old-fashioned mortgage system is relegated to the rear, our farmers are practically out of debt, and prices have been satisfactory. Why shouldn't the Arkansas farmer feel happy?

New people are coming to Western Arkansas from all sections of the United States, our climatic conditions are being understood, our diversified agriculture is becoming known, our wonderful fruit success is attracting universal attention, our great smokeless coal deposits and natural gas establishes our success in industrial development. The many railroads centering here, determined to make Fort Smith the great commercial center of the Southwest, adds additional interest to the many good things in store for us. Land is cheap, very productive, and all it needs is intelligent and industrious farming to produce good crops and have a bank account. Every day brings new developments in our agricultural resources. Here you find a happy and contented people, a good government and healthy climatic conditions, good water, plenty of timber land and hunting galore. Our streams are stocked with fish of the bass, cat, drum, buffalo and German carp varieties. Really Nature seems to have been very lavish in her favors in this section, and those who learn of this new land of promise and take advantage of the possibilities are to be congratulated.

Cotton, corn, fruit and contentment are the watchwords of our success in Western Arkansas. GEO. SENGEL, Secretary.

Oklahoma's Coal Output in 1912.

The total production of coal in Oklahoma in 1912, according to E. W. Parker of the United States Geological Survey, was 3,675,418 short tons, having a value at the mines of \$7,867,331. These statistics have been compiled in co-operation with the State Geological Survey.

The coal areas of Oklahoma belong to the Western Interior coal field. They lie entirely in the eastern and northeastern parts of the State, forming the connection between the Kansas fields on the north and the Arkansas fields on the east. The principal developments are in the southern portion of the field, in what was formerly the Choctaw Nation of the Indian Territory and is now included within Coal, Haskell, Latimer and Pittsburg

counties. The total area underlain by workable coal is estimated at 10,000 square miles. The coals, of which there are 10 or more beds, range from a medium-grade to a high-grade bituminous, some of the latter approaching semi-anthracite. Some of the higher grades have coking qualities, but efforts to make coke in the several hundred beehive ovens constructed for that purpose have not been conspicuously successful.

Diminished production of petroleum and natural gas in the Mid-Continent field is reflected in increased production of coal in Oklahoma in 1912 and a substantial advance in prices. The quantity of coal produced increased from 3,074,242 short tons, valued at \$6,291,494, in 1911, to 3,675,418 tons, valued at \$7,867,331, in 1912. The record of 1912 exceeded that of the previous maximum output (in 1907) by nearly 33,000 tons. Compared with 1911, it showed a gain of 601,176 short tons, or 19.6 per cent., in quantity, and of \$1,575,837, or 25 per cent., in value. The average price per ton advanced from \$2.05 to \$2.14. The year 1912 was the first in a decade to encourage the coal-mine operators of Oklahoma and the other Southwestern States. For 10 years the industry in those States had been kept practically at a standstill, the output of 1911 being just about the average for the decade ended in that year. The production in 1912 exceeded that average by nearly 20 per cent. The only assignable reason for the increased activity in 1912 appears to be, as already stated, the diminution in the supply of natural gas and fuel oil in the markets tributary to Oklahoma coal. Competition with coal from other States, particularly Colorado and New Mexico, continues keen.

DUCKTOWN COPPER ORES.

A Region in Three States Rich in Native Mineral.

Another unit has been added to the great geologic atlas of the country which the United States Geological Survey is constructing. This is the result of the surveys and investigations of the area known as the Ellijay quadrangle, in Georgia, North Carolina and Tennessee, by geologists Laurence La Forge and W. C. Phalen. Only a small portion of the quadrangle is included in North Carolina and Tennessee. Important towns within the area are Copperhill, Tenn., and Blue Ridge and Ellijay, Ga. Copperhill is the headquarters of the Tennessee Copper Co., while a few miles to the north, at Isabella, just outside of the quadrangle, are the headquarters of the Duckton Copper, Sulphur & Iron Co.

The geology and mineral resources of the quadrangle are described in the folio just issued by the Survey, with accompanying topographic and geologic maps. Of most interest to the public is the discussion of the economical valuable minerals and rocks of the region, which include, among the metals, gold, copper and iron ores principally, together with manganese, silver and lead ores of less importance, and among the non-metallic minerals and rocks, marble, dolomite, mica, talc, abrasive materials and graphite. There are important mineral springs in the area which are visited during the summer by people from the lower and hotter parts of Georgia. The power of the streams that come tumbling down from heights of the Blue Ridge, which cuts across the area from northwest to southeast, is another valuable resource. As an illustration the towns of Blue Ridge and Copperhill are now lighted by electricity derived from installations on Fightingtown Creek. Toccoa River affords a possibility of a large future development of power.

The gold in the area is found in veins and in placer deposits, and has been mined in many widely scattered places. It is reported that the largest nugget of gold ever found in Georgia came from the placer mine at Whitepath, in the western part of the quadrangle. This nugget was valued at \$1100.

Prospecting for copper has resulted in the discovery of a number of more or less promising prospects in the northwestern part of the area, a few of which have been opened, worked for a short time and then abandoned. The ore in some of the prospects is regarded as having an origin similar to that of the important ore deposits in the area to the north, a fact which should make them of more than ordinary interest and a field for future and careful investigation.

Iron and manganese ores occur along or near the faults of the valley area. The iron ore is of the brown type. Important deposits of this type are now being worked near Talona, just at the west edge of the quadrangle, and it is more than likely that with careful prospecting other deposits will be found. The folio text indicates the geologic relations of the ore, and if it is studied in conjunction with the geologic maps accompanying the folio, a clear idea should be obtained of places where other and similar deposits may be expected to occur.

Marble is also an important resource of the Ellijay area. To judge from physical appearances alone the marble of the quadrangle ranks high among Georgia marbles, which, as is well known, stand among the best in strength, low absorption and resistance to weathering. Though the marble has hitherto not been quarried on a large scale for building purposes, it has been used for flux, and the magnesian phases have been used in the manufacture of Epsom salts and carbon dioxide.

The mineral resources of the quadrangle are described in detail in the folio and a map showing the locations of the principal mineral deposits is also included. The Ellijay folio comprises 17 pages of text, four maps and columnar and cross-sections. The price is 25 cents, and copies may be purchased from the Directors, U. S. Geological Survey, Washington, D. C.



GYPSUM MILL IN VIRGINIA.

The wall plaster mill of the Southern Gypsum Co. at North Holston Va., shown in the accompanying illustration, has a capacity of 300 tons of wall plaster in 24 hours. The company has another mill which takes care of its crude gypsum shipments, this material being an ingredient in Portland cement and used as fertilizer under the name of land plaster. The raw material used in making wall plaster is gypsum, which is taken in large quantities from the company's mines at North Holston.

The Pittsburgh district of Pennsylvania consumed last year 17,721,783 tons of coal and 5,000,000 tons of coke, or about 22,700,000 tons of fuel, according to Edward Wheeler Parker of the United States Geological Survey, the largest consumption of fuel by any community in the world.

GOOD ROADS**WEEK'S HIGHWAY RECORD.**

Progress in Southern Road and Street Improvement.

[Further details of highway undertakings and bond issues mentioned below are given under the headings Construction Department and New Securities, published elsewhere in this issue.]

Bonds Voted.

Bartlett, Tex.—Bartlett district of Williamson county voted \$15,000 bonds for road construction.

Snow Hill, N. C.—Green county voted \$20,000 bonds for road improvements.

Bonds to Be Voted.

Anderson, S. C.—City contemplates voting on \$75,000 bonds for street paving.

Carthage, Miss.—Leake county votes August 19 on \$30,000 bonds for road construction.

Groveton, Tex.—Trinity county precinct No. 2 will vote on \$100,000 bonds for road construction.

Hamilton, Ala.—Marion county votes November 1 on \$100,000 bonds for road construction.

Valdosta, Ga.—City votes September 15 on \$35,000 bonds to pave streets.

Contracts Awarded.

Baltimore, Md.—City awarded \$46,000 and \$82,000 contracts for street paving with asphalt, granite blocks, vitrified blocks, etc.

Bonham, Tex.—City awarded contract for concrete sidewalks costing \$8000.

Denison, Tex.—City awarded \$50,000 contract for rock asphalt street paving.

Gause, Tex.—Gause district of Milam county awarded contract for road construction, \$50,000 bonds being available.

Memphis, Tenn.—City awarded \$20,000 contract for street paving.

Contracts to Be Awarded.

Baltimore, Md.—City receives bids until August 27 for 22,800 square yards of bituminous concrete paving.

Buckhannon, W. Va.—City will pave 16,000 yards of streets and lay 10,000 linear feet of cement curbing.

Danville, Va.—City will expend \$30,000 to improve streets.

Greenville, Miss.—Levee Commissioners receive bids until September 8 for constructing 17,500 square feet of concrete pavement with accompanying curb, etc.

Greenville, Ky.—City will construct two miles of macadam streets.

Holly Springs, Miss.—Marshall county opens bids September 2 for laying 2200 feet of concrete paving.

Lake City, Fla.—City opens bids September 8 for 3500 square yards of cement sidewalks.

Laredo, Tex.—Webb county receives bids until August 27 to construct 34 miles of road.

Princess Anne, Md.—Somerset county receives bids until September 2 for constructing two miles of road.

Stevenson, Ala.—Jackson county opens bids September 16 for grading, draining and macadamizing roads, estimated cost being \$8000.

Waco, Tex.—City receives bids until August 22 for constructing 15,000 square yards of paving, 6000 linear feet of gutter, 1500 linear feet of new curb, etc.

To Use North Carolina Granite.

Contracts recently awarded by the city of Baltimore in connection with the extensive paving improvements it has in progress included one (for granite paving blocks) amounting to \$315,000, se-

cured by the Southern Marble & Granite Co. of Spartanburg, S. C. This company writes to the MANUFACTURERS RECORD as follows:

"The material is very fine grain blue granite of the same texture, grain and color as the famous Barry granite. We have what is considered one of the largest quarries in the country of fine grain blue granite, a very high quality of monumental stone. Our quarry consists of one solid ledge or monolith of 65 acres. It has a gradual rise in height of 150 feet above the level of our railroad. We have an equipment sufficient to produce 25 carloads per day."

\$1,163,000 for Arkansas Roads.

The new road law in Arkansas creating the State Highway Commission will result in extensive road and bridge improvements throughout that State. It provides for a tax to aid road improvement, and the State Auditor announces that \$1,163,684 will be available during the year.

FOREIGN NEEDS

Motor Cars, Tires, Etc.

Martin Bros. & Co., 15 Pelayo, Oviedo, Spain, write to the MANUFACTURERS RECORD as follows:

"We would act as agents for any of your people desiring to do business in the north of Spain. We can unquestionably secure good results, provided your merchants aid us with favorable terms, no less than information in advance as to the net cost of their goods on the spot here. The things that are of immediate interest to us are: Automobile tires; cheap or low-priced automobiles, costing not more than \$1000 delivered here in Spain on the spot; motorcycles; fireproof safes for valuables; shoes, leather and gum (rubber)."

For Austrian Trade.

Adolph Rosenfeld, 1, Wallfischgasse 4, Vienna, Austria, writes to the MANUFACTURERS RECORD as follows:

"Be kind enough to repeat my desire in your paper for articles as follows: Novelties for household and kitchen; novelties for technicals trade of any line; novelties in suspenders, garters and sockholders; leather of any sort for any use; novelties in tools for hand use for any trade and line. Please mention, in case of reply of manufacturers, lowest prices and samples are desired in order to gain time, as the season in our country commences beginning September."

Cannon and Firearms.

Hakki Mahmoud Bey, 72 Rue Ebuss-nond, Stamboul, Constantinople, Turkey, writes to the MANUFACTURERS RECORD as follows:

"Kindly do me the favor of giving me the addresses of some substantial houses manufacturing arms and cannon. I would like also, if possible, to get the names of some American people of means who are engaged in forming corporations and also in assisting in getting capital for them when formed."

Railway-Car Fenders.

D. Lichtscheff, Tramway 6 Station, Odessa, Russia, writes to the MANUFACTURERS RECORD as follows:

"Send me the addresses of a few firms making nets and fenders of the latest and most improved systems for preventing accidents on electric tramways."

RAILROADS

[A complete record of all new railroad building in the South will be found in the Construction Department.]

ELECTRIC CONTRACT LET.

Westinghouse Company Will Supply Locomotives and Other Apparatus to Norfolk & Western.

A contract for supplying all the electrical apparatus needed by the Norfolk & Western Railway in the electrification of its Bluefield-Vivian section of some 85 track miles, or about 30 route miles, has been awarded to the Westinghouse Electric & Manufacturing Co. It will include the construction of 26 electric locomotives of 130 tons weight each, of the single-phase-two-phase type, besides all the power-house generating machinery and transmission apparatus.

Single phase alternating current of a frequency of 25 cycles and at 11,000 volts pressure will be supplied to the locomotives through an overhead suspended trolley wire, which is identical with the overhead system long successfully used by the New York, New Haven & Hartford Railroad on its main line; by the Boston & Maine Railroad in the Hoosac Tunnel, and also by the Grand Trunk Railway in the Sarnia Tunnel, etc. The locomotives to be built for the Norfolk & Western, in addition to being very large and possessing enormous hauling capacity, will embody many unique features and requirements of design which are expected to show unprecedented flexibility and economy of operation.

The tonnage of coal handled on the Bluefield-Vivian section, which serves the Pocahontas region, amounts to 65,000 tons per day, necessitating trains weighing as much as 3250 tons each, and electric operation was decided upon to facilitate the traffic there. There are a number of grades, and now three Mallet locomotives are needed to each train, but only two electric locomotives will be required for the same work, and the speed will be doubled, thus enlarging the capacity of the road. A 3100-foot tunnel on the line will cease to present an impediment to rapid service because electric operation will cause an absence of smoke and gas. The apparatus will be of such design that tonnage can be increased as service may demand. The power-house will be at Bluestone, W. Va., where the Westinghouse Company will install a capacity of 27,000 kilowatts in turbo-generators.

It is further claimed for the proposed electrification that a minimum electric equipment will give practically continuous service, with fewer engine crews per train; also that electric locomotives will not be limited to short hours of service as are steam locomotives by fire and boiler conditions, and delays for water and coal will be eliminated.

Work under the contract will begin immediately, and it is to be completed next summer.

Contract for the erection of the power-house has not yet been awarded; there are some details concerning the building which are yet to be decided.

Page's Little Road a Success.

The Sand Springs Railway, which was built by Charles Page from Tulsa, Okla., to Sand Springs, is a decided success, according to a report from that city. The little road, which has only about eight miles of main line, furnishes a connection from the Frisco system at Tulsa to the Missouri, Kansas & Texas Railway at Sand Springs, and it is said that the

freight traffic over the link has been steadily increasing, so that, in addition to its main line, the road has seven or eight miles of switches and sidings, and is adding to them. An extension is being made at Tulsa to connect with the Midland Valley Railroad and also with the Santa Fe system. The line is handling now from 50 to 100 cars of freight every day. It is described as being practically a property of the Children's Home at Sand Springs, which was erected by Mr. Page, and it employs about 100 people. The road's passenger trains during July carried about 87,000 persons, mostly to and from Sand Springs Park.

NEW INDUSTRIAL DISTRICT.

Important Railroad and Business Development in Georgia's Capital.
[Special Cor. Manufacturers Record.]

Atlanta, Ga., August 21.

Work will begin in the next few days on an extensive business development in what is known as Atlanta's West Side, which will open for the use of wholesale houses, warehouses and manufacturing plants property lying between Nelson and Walker streets and the line of the Southern Railway, having a street and railway frontage of 2500 feet. The property is ideally located, being just across the railway from the Madison avenue freight terminal of the Southern Railway, and within three blocks of the Atlanta Terminal Station.

All necessary grants have been received from the city, and right of way for tracks to serve the new industrial district has been deeded to the Southern Railway and the Atlanta, Birmingham & Atlantic Railroad by the syndicate which owns the property. Bids have been asked for the first excavation to be done, and as soon as contract is awarded work will begin. It is planned to construct a double-track lead running through the property from the Southern Railway across Mangum street to Haynes street. From this lead house tracks to serve warehouses and industries will be built.

The development will provide business locations situated close to the business center of Atlanta, and will mean a substantial addition to the city, as this property is now all occupied by dwellings. The syndicate owning the property is composed of some of Atlanta's foremost business men, and is incorporated as the Investment Company of the South, W. S. McKemie, president, and E. D. Duncan, secretary.

New Equipment, Etc.

It is announced in New York that the International & Great Northern Railroad has sold to Blair & Co. and the Equitable Trust Co. of that city \$1,000,000 of 5 per cent. equipment trust notes.

Baltimore & Ohio Railroad within the past three years has bought 600 locomotives and 25,000 freight cars. Most of the locomotives were for freight service. The prospect for car supply on the system for fall business is encouraging, as the transportation department has adopted methods to obtain the greatest service from all equipment.

San Antonio & Aransas Pass Railway has purchased eight consolidation locomotives from the Baldwin Works, Philadelphia.

Pennsylvania Railroad has ordered 300 tons of steel from the American Bridge Co. for a pier shed at Baltimore.

Greenville (S. C.) Traction Co. has received three pay-as-you-enter cars from the Southern Car Co., High Point, N. C. Baltimore & Ohio Railroad and Norfolk & Western Railroad are reported in

the market for from 500 to 600 tons of bridge steel each.

Southern Railway has ordered 420 gondola cars from the Mount Vernon (Ill.) Car & Manufacturing Co.; also 800 gondola cars and 500 box cars from the American Car & Foundry Co., St. Louis.

Chicago & Alton Railway is reported receiving bids for 2000 tons of steel for repair shops.

Santa Fe system is reported in the market for 30,000 tons of rails, and the Burlington system for 50,000 tons.

RAILROAD FOR FARMERS.

Colonel Prouty of Arcadia, Fla., Plans a Gasoline Line for Local Traffic Mainly.

Col. E. Prouty of Olive Place, R. F. D. No. 1, Arcadia, Fla., proposes the construction of a railroad to be operated with gasoline motor cars from Arcadia to Lake Okeechobee, a distance of about 55 miles, and he thinks that similar reasonable means of transportation is "the one important improvement to bring the South into the line of permanent progress." He is also making estimates on two other interurban lines, about which announcement is to be made later.

The road to Lake Okeechobee, it appears, is to be provided with sundry switches and branches to reach plantations and thus be able to afford quick but adequate transportation facilities to fruit and vegetable growers. It is estimated that the main line will provide enough profit from through traffic to take care of the road, and thus permit satisfactory rates to be given for local service, which will induce settlers, and in consequence greater development of the country. It is aimed to furnish a siding for the use of practically every farmer. Rice and sugar raising are expected to be stimulated by the railroad.

A report from Bartow says that Colonel Prouty will use on his projected lines gasoline motor cars of 50 passengers capacity each, and also having a compartment for baggage. Speed will be 40 miles per hour. Low operating costs are claimed for the cars.

BIG CONTRACT ANNULLED.

\$1,500,000 Will Not Be Spent in Texas Because of Suit Against Company.

Referring to the recent report that the Missouri, Kansas & Texas Railway had awarded a contract to Butler Bros. of Dallas, Tex., to improve about 600 miles of its roadbed in that State at a cost of about \$1,500,000, the company says that the contract was made some time ago with Henry and William Butler for burning an amount of gumbo or clay ballast for the road, but on account of a suit having been entered against the company by the Attorney-General of Texas a good deal of the work that was contemplated has been abandoned and the contract was cancelled.

It is also further stated in connection with this explanation about the contract that President C. E. Schaff has declared that it would be unwise for the company to make further investments in Texas because of the hostility of the State's administration or until the rights of the company have been determined by the courts.

A report from Austin says that the Attorney-General has prepared a bill for introduction in the Legislature to change the legal status of all the railways, and it is expected that if it be passed the suit against the company will be dismissed. This suit, it seems, is to recover several millions of dollars alleged to be due in the way of penalties.

Van Horn Valley Development.

R. H. Owen of Minneapolis, Minn., president and one of the incorporators of the Van Horn Valley Railway Co. of Van Horn, Tex., telegraphs that the line will be standard gauge and 60 miles long, costing approximately \$10,000 per mile.

The land in the valley, he further states, is all underlaid with water at shallow depths convenient for irrigation by pumping. The tract is to be developed by installing pumps, and it will be sold in units of from 40 acres upwards.

According to a report from Texas at the time the company was incorporated, a week or two ago, it can ultimately construct about 200 miles of line in Texas and New Mexico. The beginning of the road will be at Lobo, Tex., on the Southern Pacific Railway, and it will cross into New Mexico at Crow Flat.

J. M. Daugherty, J. Y. Canon and Joe Irby of Van Horn, Tex., are also interested.

Extending the Use of Telephones.

The Western Maryland Railway Co., which is now using telephones for train dispatching on its main line between Hagerstown and Cumberland, Md., has decided to extend their use to some other portions of its system, which will make about 326 additional miles of track to be covered. The contract has been awarded, and the work of installing the telephones is about to begin. The extension of the service will include the Connellsville extension, the line from Cumberland to Elkins, W. Va., and all branches.

It is stated in connection with the announcement of this extension of telephone dispatching service that there is no doubt that the system east of Hagerstown will be equipped with telephones in the near future. The use of them between Hagerstown and Cumberland has greatly increased operating efficiency, as train crews are enabled to keep constantly in close touch with the dispatcher's office.

Magnolia Cut-Off Advancing.

The Baltimore & Ohio Railroad is pushing work on the construction of the Magnolia cut-off from Orleans Road to Little Cacapon, W. Va., there being now about 4000 men employed by the contractors on the job. As the work advances the forces will be increased, and by the autumn probably 5000 to 6000 men will be engaged there. The completion of this work will give the company two additional tracks between the points named, besides effecting a saving of nearly six miles in distance. F. L. Stuart, Baltimore, is chief engineer.

Louisville & Nashville's Year.

The Louisville & Nashville Railroad's report to the Interstate Commerce Commission for the fiscal year ended June 30 shows total operating revenue, \$59,465,699; total operating expenses, \$44,810,880; taxes, \$1,761,626; operating income, \$12,913,620. Last year the figures were: Total operating revenue, \$56,211,788; total operating expenses, \$39,626,327; taxes, \$1,854,684; operating income, \$14,722,597.

Officers Announced.

The Brinson Railway Co. announces a revised list of officers and directors who were recently elected as follows: John H. Hunter, president; R. M. Hitch, secretary and treasurer; Richard Morgan, general manager; directors, James Imbrie and John F. Wallace of New York, Mills B. Lane, E. T. Comer, H. D. Stevens, Geo. F. Armstrong, Thos. P. Good-

body and John H. Hunter of Savannah, Ga., Mr. Imbrie is chairman of the board.

Improvements at Dyersburg, Tenn.

The Illinois Central Railroad Co. says, concerning improvements at Dyersburg, Tenn., that the work consists of the construction of a 90-car storage track, additional team tracks of 36 cars capacity, and rearranging of the engine-handling facilities. There will not be any new buildings erected nor any extensive bridge work. Aside from the grading, all work will be done by the company's forces.

Would Issue Bonds and Notes.

Application has been made to the Georgia Railroad Commission by the Brinson Railway Co. for authority to issue \$2,562,500 of its first and refunding mortgage sinking fund gold bonds; also \$1,250,000 of two-year 6 per cent. gold notes. Hearing on the application will be held before the commission August 26. As heretofore announced, the company has extensions and improvements under consideration.

Railroad Notes.

Thomas Spratt has been appointed assistant purchasing agent of the Norfolk & Western Railway, with office at Roanoke, Va. E. T. Burnett is purchasing agent.

A. B. Adams has been appointed master mechanic of the Beaumont division of the Gulf, Colorado & Santa Fe Railway, with headquarters at Silsbee, Tex., succeeding J. E. McQuillen, promoted to the position of mechanical superintendent.

Charles F. Stewart has succeeded F. M. Howell as general passenger agent of the Western Maryland Railway, Mr. Howell having resigned to engage in other business. Mr. Stewart was formerly superintendent of the tariff department of the Southeastern Passenger Association, Atlanta, Ga.

Eugene B. Hoskins has been appointed freight solicitor for the Pennsylvania Railroad at 336 Fulton street, Brooklyn, N. Y., and William L. Peebles has been appointed to a similar position at Baltimore and Calvert streets, Baltimore, Md., to fill the vacancy created by the promotion of Mr. Hoskins.

The South Carolina Power, Light & Railway Co. is making extensive improvements at East Spartanburg, S. C., erecting machine shop, a carpenter shop and a paint shop, while the car barn is being enlarged. About \$50,000 is being expended overhauling the lines in Spartanburg. New cars are also bought.

MINING**Midyear Spelter Statistics.**

Figures compiled by C. E. Siebenthal, of the United States Geological Survey, from reports by all zinc smelters operating during the first six months of 1913 and from the records of the Bureau of Foreign and Domestic Commerce show that the production of spelter from domestic ore in that period was 171,135 short tons and from foreign ore 9078 short tons, a total production of 180,213 tons of primary spelter, compared with 166,496 tons for the first half of 1912 and with 172,310 tons for the last half of 1912. This production for the first half of 1913 is at the rate of over 360,000 tons a year, and approximately 20,000 tons greater than the production in 1912. The spelter made in Illinois increased over 9000 tons and that made in Kansas declined 6000 tons, compared with the quantities of

spelter made in those States during the last six months of 1912. The apparent consumption for the period was 153,073 tons, as compared with 181,326 tons for the last half of 1912 and 159,046 tons for the first half of 1912. The stock of spelter held at smelters on June 30, 1913, was 21,856 tons, as against 4522 tons at the beginning of the year, an increase of 17,334 tons.

The imports of zinc ore were 19,994 short tons, containing 9204 tons of zinc, as compared with 16,891 tons of ore, containing 5339 tons of zinc, in the last half of 1912, and 27,049 tons of ore, containing 12,228 tons of zinc, in the first half of 1912. The exports of domestic zinc ore were 9745 tons, as compared with 9640 tons in the last half of 1912 and 13,700 tons the first half of 1912.

At St. Louis spelter started the year at 7½ cents, the maximum price for the first half of the year. For the greater part of January the price held this level, but there followed a long steady decline, broken by a slight recovery during the first half of March, which decline left spelter bringing a shade under 5 cents per pound at the middle of June. A slight recovery through the latter half of June brought the price up to 5.15 cents at the close of the period. The London price of spelter, on the contrary, was fairly steady through the first four months of the year, opening at £26 10s. per long ton (5.76 cents per pound), declining to £24 10s. (5.33 cents per pound) by the middle of March, but rising again to £25 15s. (5.6 cents per pound) by the close of April. A sharp decline beginning about the middle of May brought the London price of spelter down at the close of this period to £21 per long ton (4.57 cents per pound).

A \$250,000 Gravel Company.

The Tennessee Gravel Co., Nashville, Tenn., has been incorporated, with a capital stock of \$250,000, by T. A. Clarkson, Charles B. Wilson, Robert M. Wilson and associates for the purpose of developing gravel properties. Mr. Clarkson wires MANUFACTURERS RECORD as follows: "All machinery is installed and plant is about complete; will be ready on September 1 to deliver 2000 yards daily; plant located two miles southeast of Nashville."

Gold Mining in North Carolina.

Walter George Newman, president of the Gold Hill Consolidated Co., Gold Hill, N. C., in a letter to the MANUFACTURERS RECORD reports that mining operations will be actively resumed and states that he has recently found the outcropping of a vein two feet wide carrying a high percentage of gold.

To Develop 125,000 Acres in Florida.

Messrs. Thompson & Jackson of Toulon, Ill., write to the MANUFACTURERS RECORD as follows:

"We have purchased (from the Florida East Coast Line Canal & Transportation Co.) about 125,000 acres of land lying along the east coast of Florida and located mainly in Dade, Palm Beach, St. Lucie, Brevard and St. John's counties. Our business in Florida has been limited to purchase of wholesale tracts and disposal of such lands to companies and syndicates which develop the lands. It is our intention to incorporate in Florida under the name of the Prudential Land Co. as a holding company for the above purchase. A little later some development work will be done and the lands put on the market."

TEXTILES**Deep River Mills.**

The Deep River Mills, Randleman, N. C., writes to the MANUFACTURERS RECORD as follows:

"We have built a central power plant to develop 1000 horse-power. This plant is equipped with three Manning type boilers, 200 horse-power each, 185 pounds pressure; a Rice & Sargent cross-compound condensing engine, 18 and 38½ in., running at 150 revolutions per minute, direct connected to an Allis-Chalmers generator, 600 volts, 60 cycles, and the different departments of the plant are driven with motors. The water-power is connected to two synchronous motors of 250 horse-power each, and when there is no water they are disconnected from the water-wheels and operate as motors, but when there is an excess amount of water the synchronous motors become generators and the excess current is delivered to the switchboard in the power plant for use elsewhere. All the motor equipment is General Electric Co. make, and about 21 motors are in use. This central plant displaces five Corliss engines and three slide-valve engines which have been operated in the past non-condensing, and six low-pressure boilers. Boilers are retained at two plants to heat the buildings in cold weather, as they are too far away from the central plant, one boiler-room being located about three-quarters of a mile from the central power plant. Needless to say that we are obtaining a very decided economy in coal consumption with the new plant. J. E. Sirrine of Greenville, S. C., was the engineer, and all construction work was done with day labor under our own supervision."

Sisal Hemp Enterprise.

The Sisal Hemp & Development Co., St. James City, Fla., has completed its 80-spindle mill, driven by steam and electric power, with a 10-hour capacity of six tons of rope and twine. It has also completed a machine shop and tar plant for tarring the lath yarn manufactured. Both manila and sisal hemp are being used, most of the sisal being imported from Nassau and the manila coming from the Philippine Islands. The company is proceeding rapidly with its hemp planting, and proposes to grow it in sufficient quantities to meet its factory consumption. About 100 men and women are now employed in the sisal fields and the mill.

A \$100,000 Hosiery Company.

The Gibsonville (N. C.) Hosiery Mills, capital stock \$100,000, has been incorporated by J. L. Kernodle, G. W. Fogleman, W. C. Michael and others.

Textile Notes.

The Wymojo Yarn Mills will add 2160 spindles (not 2000, as stated last week), and has awarded contract.

The Southern Aseptic Cotton Co., Columbia, S. C., will probably rebuild its mill, burned last week at a loss of \$50,000.

S. Saricansas, Augusta, Ga., will establish a silk mill at Anderson, S. C. He is now importing raw silk, but plans to cultivate the silkworm.

The Patterson Manufacturing Co., China Grove, N. C., will not rebuild portion of mill or construct dam addition; recent report was an error.

The Culpeper (Va.) Silk Mill, recently reported incorporated with \$50,000 capital stock, is reported as under the management of the Rigby Silk Co. of Paterson, N. J.

Construction Department

TO OUR READERS!

In order to follow up properly the Construction Department items, please bear in mind the following statements:

EXPLANATORY

The MANUFACTURERS RECORD seeks to verify the items reported in its Construction Department by full investigation. It is often impossible to do this before the item must be printed or else lose its value as news, and in some items it is found advisable to make statements as "It is reported" or "rumored," and not as positive information. If our readers will note these points they will see the necessity of the discrimination. We are always glad to have our attention called to errors that may occur.

HOW TO ADDRESS

The name of one or more incorporators of a newly incorporated enterprise should always be shown on letter addressed to the official headquarters or to the town of the parties sought, as may be shown in the item. Sometimes a communication merely addressed in the corporate or official name of a newly established company or enterprise cannot be delivered by the postmaster. By following these general directions the postoffice will be enabled to deliver your mail promptly, although it is inevitable that some failure by the postal authorities to deliver mail to new concerns will occur.

WRITE PERSONAL LETTERS

In communicating with individuals and firms reported in these columns a letter written specifically about the matter reported will receive better and quicker attention than a circular. In most instances a return postal card or addressed and stamped envelope should be enclosed with letter.

In correspondence relating to information published in this department, it will be of advantage to all concerned if the Manufacturers Record is mentioned.

The Daily Bulletin of the Manufacturers Record is published every business day in order to give the earliest possible news about new industrial, commercial, building, railroad and financial enterprises organized in the South and Southwest. It is invaluable to manufacturers, contractors, engineers and all others who want to get in touch at the earliest moment with new undertakings, or the enlargement of established enterprises. The subscription price is \$25 per year. On all advertising contracts in the Manufacturers Record for three months or longer a subscription to the Daily Bulletin is included for the contract period.

BRIDGES, CULVERTS, VIADUCTS

Ala., Birmingham.—City Commissioners, Walter G. Kirkpatrick (City Engineer) and various railroads entering Birmingham are considering construction of system of viaducts and subways to eliminate grade crossings; planned to build viaducts at 28th St., 26th St., 21st St. and throughout western portion of city.

Ga., Columbus.—Muscookee County Commissioners will consider plans submitted for concrete bridge across stream on Whitesville Rd. three miles north of city; length 30 to 40 feet.

Ga., Sulphur Springs.—Dade county will construct steel highway bridge across creek near Sulphur Springs; plans and specifications furnished by Converse Bridge Co. on file in office of C. S. Turner, ordinary, Trenton, Ga.; bids received until September 6. (See "Machinery Wanted.")

Ky., Elizabethtown.—Hardin County Commissioners are arranging for construction of proposed bridge across Nolin River at Star Mills; structure to consist of two spans, one 50 feet and one 100 feet long; cost \$3000; W. T. Brown (former road commissioner) and Sam Waggoner (magistrate) will superintend building of concrete abutments; Champion Bridge Co. of Wilmington, O., has general construction contract.

Ky., Lexington.—City and Louisville & Nashville Railroad (W. H. Courtenay, chief engineer, Louisville, Ky.) will build viaduct to cost about \$50,000; bids opened; J. Ernest Cassidy, Mayor.

La., Baton Rouge.—Police Jury, F. A. Woods, secretary, awarded contract to Austin & Co. of Dallas, Tex., at \$5200 to build six steel bridges. (Call for bids lately noted.)

Mo., Kansas City.—City engineering department, Curtis Hill, city engineer, prepared plans for high line bridge across Kaw River to connect with proposed 23d St. traffic way; plans call for temporary approach to cost about \$20,000 and main structure 3000 feet long above railroad yards and stock pens from 23d St. to State line to cost about \$350,000; high line bridge would end at State line, 30 feet above ground.

Okla., Chickasha.—Grady county receives bids until August 22 for construction of three bridges; two across East Bitter Creek; one across Spring Creek; F. P. Bradley, County Clerk. (See "Machinery Wanted.")

Okla., Stigler.—Haskell county defeated \$60,000 bond issue for bridge construction. Address County Commissioners. (Recently noted.)

S. C., Florence.—Florence County Supervisors plan to construct various bridges; will have \$10,000 available under special Legislative appropriation.

Tex., Fort Worth.—City awarded contract to Austin Bros. of Dallas, Tex., at \$3975 to construct west approach to N. 12th St. bridge; two 30-foot reinforced concrete girder spans, 300 feet of reinforced concrete retaining walls, and about 1200 cubic yards earth fill; F. J. Von Zuben, City Engineer; John F. Grant, Commissioner of Streets and Public Properties. (Call for bids lately noted.)

Tex., Waco.—McLennan County Commissioners awarded contract to Austin Bros. of Dallas, Tex., at \$8919.29 to build four bridges.

Va., Clintwood.—Dickenson county will erect bridge across Cranes Nest Creek; bids received September 2; structure 106 feet 3 inches long; 12-foot roadway; one standard 70-foot span and two 18-foot spans; concrete substructure; P. St. J. Wilson, State Highway Commissioner, Richmond, Va. (See "Machinery Wanted.")

Va., Quantico.—Stafford and Prince William counties will construct 30-foot-span steel bridge across Chappawamsic Creek on Telegraph Rd. between two counties; W. G. Sneed, chairman Stafford County Commissioners, Stafford, Va., and C. F. Bailey, chairman Prince William County Commissioners, Dumfries, Va., receive bids until September 15. (See "Machinery Wanted.")

W. Va., Branchland.—Lincoln county is reported to construct bridge across Guyan River at Branchland. Address County Commissioners.

W. Va., Charlestown.—Charlestown district of Jefferson county voted \$35,000 bond issue to construct bridge across Shenandoah River. Address County Commissioners. (Recently mentioned.)

W. Va., Grafton.—Taylor county will construct concrete arch bridge across Bartley Creek on Philippi Pike; bids received at courthouse until August 30; I. J. Thomas interested. (See "Machinery Wanted.")

CANNING AND PACKING PLANTS

Fla., Fort Myers.—Southern Land & Investment Co. plans to establish cannery. (See "Machinery Wanted.")

Ga., Columbus.—A. W. Armour of Columbus and J. C. Armour of Eufaula, Ala., contemplate organizing company to establish cannery.

Ga., Fitzgerald.—L. L. Griner will build cannery for vegetables; will also manufacture and can cane syrup.

CLAYWORKING PLANTS

N. C., Carthage.—Bricks.—North Carolina Red Brick Co., capital stock \$5000, incorporated by W. R. Clegg, J. W. Seawell and others.

N. C., Gaston County.—Bricks.—Spencer Mountain Brick & Stone Co. of Charlotte, N. C., will establish plant with daily capacity 20,000 bricks; will probably install three material measuring machine for dry mixing materials, concrete mixer, etc.

S. C., Grattan (not a postoffice).—Bricks. Charlotte Brick Co., S. S. McNinch, president, Charlotte, N. C., will install additional machinery, increasing daily capacity of plant from 100,000 to 200,000 bricks; proposes to install equipment every 90 days in units with capacity of 25,000 bricks daily until output has been doubled.

COAL MINES AND COKE OVENS

Ala., Bridgeport.—Dr. R. V. Prince will develop coal mines near Bridgeport and Lunyon, Ala.; will ship coal from Bridgeport by barges on Tennessee River, and is building 15-mile railroad to mines at Lunyon.

Ala., Morris.—Burawell Coal Co., Birmingham, Ala., will, it is reported, develop coal mines.

Ark., Russellville.—Acme Anthracite Coal Co., incorporated by C. B. and B. V. Lewis, James and Will McEver, John Chaffin and others; will develop Humphrey-Smith coal mines.

Ky., Hazard.—A. C. Rhinehart, president North Fork Coal & Timber Co., advises that company holds about 20,000 acres of coal and timber lands; will operate some and sell some; W. M. Purcellville, construction engi-

PROPOSAL ADVERTISEMENTS

IN THIS ISSUE ARE

PUBLISHED ON PAGES 82 and 83.

In order to secure best bids from leading engineers, contractors and investment houses, the proposal advertising columns of the Manufacturers Record are invaluable.

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neer. (Mr. Rhinehart recently noted as arranging for certain developments.)

Ky., Louisville.—Continental Coal Corporation of Kentucky, capital \$30,000, chartered by Charles C. Moore and Louis A. Powell.

Ky., Middlesboro.—J. T. Reed Coal Co., capital \$5000, incorporated by James T. Reed, H. A. McCauley and R. E. Samuels.

Ky., Pineville.—Wallins Creek Coal Co. will rebuild burned tipples.

Tenn., Mercer.—Mercer Coal Co., capital stock \$50,000, incorporated by R. L. Brown, Albert W. Biggs, Edward G. Riddick, Thos. A. Evans, R. F. LaCroix and W. M. Kennedy.

CONCRETE AND CEMENT PLANTS

Fla., Tampa.—Bricks.—W. C. McDonald & Bro., 3001 Morgan St., contemplate establishment of plant to manufacture sand and cement bricks for building brick-veneer houses.

COTTON COMPRESSES AND GINS

Ark., Canfield.—Canfield Gin Co., capital stock \$10,000, incorporated by Milton Winham, J. B. Burton and P. D. Burton.

Ark., Joiner.—Joiner Gin Co., capital stock \$6000, incorporated; S. Rolph, president; D. N. White, vice-president; J. W. Drake, secretary-treasurer.

Ark., Little Rock.—S. J. Hilton will build cotton gin to cost \$6000.

Ark., Star City.—Grumbles & Thomas awarded contract to W. A. Echois, Star City, to erect 3-70-saw gin plant; cost \$4000; machinery purchased. (Recently noted.)

Ga., Augusta.—Riverside Compress Co., L. G. Doughty, president, writes to Manufacturers Record: "Have decided not to rebuild until spring." (Recently reported to rebuild burned compress; reported loss was \$100,000.)

La., Hammond.—Hammond Progressive Union is arranging to secure establishment of cotton gin.

Miss., Evansville.—Evansville Gin Co., capital stock \$3500, incorporated by W. T. Brewer, Albert Coopwood and others.

Miss., Greenwood.—Leflore Compress & Storage Co., capital stock \$75,000, incorporated by B. B. Province, S. F. Jones, P. A. Malone and others.

N. C., Lumberton.—Robertson Manufacturing Co. will install additional gins to double capacity of plant; daily capacity to be 100 bales.

N. C., Roseboro.—Howard, Turlington & Co., capital stock \$50,000, incorporated by Frank C. Howard, James A. Turlington and J. Frank Highsmith.

S. C., Conway.—Snow Hill Gin Co., capital stock \$1000, incorporated by F. A. and D. M. Burroughs and H. H. Woodward.

Tex., Azle.—Azle Gin & Milling Co., capital stock \$8000, incorporated by W. N. McDonald, J. E. Winters and J. F. Rice.

Tex., Bogata.—Company organized with \$800 capital stock to establish cotton gin; purchased 100-horse-power engine, five 70-saw gin stands, etc.; W. M. Rozell, manager.

Tex., Electra.—County Line Union Gin Co., capital stock \$10,000, incorporated by R. L. Eeds, E. A. Dale, Abe Thomas and others.

Tex., Dewalt.—Dew Bros. Company, Houston, Tex., will erect \$10,000 gin with daily capacity 75 bales cotton; building proposals opened August 15; has machinery.

Tex., Kirvin.—Kirvin Gin Co., capital stock \$7500, incorporated by A. H. Carter, G. B. Everett and J. R. Luker.

Tex., Memphis.—W. J. Rosamond Ginnery, capital stock \$20,000, incorporated by W. J. Rosamond, G. L. Rosamond and J. H. Rosamond.

Tex., Prosper.—Farmers' Gin, capital stock \$12,000, incorporated by C. F. Love, Y. Baron and L. Baron.

Tex., Provident City.—Provident Gin, Power & Supply Co., A. C. Kinnear, president, will install recently-noted cotton gin; two-stand 70-saw; machinery contract placed; cost \$6000; daily capacity 20 bales.

COTTONSEED-OIL MILLS

Ala., Birmingham.—Porter Cotton Oil Co., capital stock \$10,000, incorporated to build cottonseed-oil mill; L. M. Porter, president; E. J. Conklin, vice-president; C. W. Wilson, secretary-treasurer.

S. C., Blacksburg.—Planters' Oil Mill Co., capital stock \$10,000, incorporated by J. L. Walker, R. C. Saratt and C. E. Sparks.

S. C., Fairforest.—Fairforest Cotton Oil Co. (recently reported incorporated with \$15,000 capital stock) organized with Dr. H. A. Ligon president-treasurer and C. B. Prince secretary; succeeds Cotton Oil Co.; now operating plant and making improvements.

Tex., Lewisville.—Lewisville Cotton Oil Co., capital stock \$25,000, incorporated by Hood Cunningham, W. W. Smith and B. L. Spencer.

Tex., Mineola.—Mineola Cotton Oil Co., capital stock \$60,000, incorporated by Claude Wiley, E. E. Carlton and R. Bergfeld.

Tex., Wichita Falls.—Farmers' Cotton Oil Co. will build six-press cold press cottonseed-oil mill; building to be one story; 308x 96 feet; brick; cement floors; capacity of feed store, 1900 tons; machinery to consist of 12 linters and 6 expellers; equipment ordered; C. E. Faires will superintend construction, installation of machinery and operation of plant.

DRAINAGE SYSTEMS

Ark., Newport.—Village Creek and White River Levee District organized with John H. Keel, president, and George R. Hays, secretary; will construct system of levees to reclaim river bottom land; Ford & MacCrea of Little Rock, Ark., engaged as engineers.

Fla., Miami.—Everglades Sugar & Land Co., 1105 Ave. C (sales office, Majestic Bldg., Chicago, Ill.), advises contemplates advertising bids to be received about October 15 on construction for 25,000-acre tract as per previous statement in Manufacturers Record item of August 14.

Fla., Vero.—Indian River Farms Co. awarded contract to Ben Johnson of Miami, Fla., to dredge canal; 20 to 50 feet wide;

7 to 12 feet deep; total yardage about 300,000; canal will be portion of drainage system costing \$250,000 for reclamation of 44,000 acres land.

Miss., New Albany.—Browns Creek Drainage District asks bids (contract to be let August 30) for five-mile drainage canal; 100,000 cubic yards; 12 feet bottom width. Address C. L. Crum, attorney for Commission. (See "Machinery Wanted.")

Mo., Elsberry.—Supervisors of Elsberry Drainage District, James C. Welch, secretary, will construct additional ditch and levee work aggregating 1,583,000 cubic yards; Harman Engineering Co. of Peoria, Ill., engineer; bids received until September 5. (See "Machinery Wanted.")

S. C., Anderson.—Z. C. Ballentine is promoting construction of drainage system to reclaim about 1000 acres land in Anderson county.

Va., Norfolk.—Richmond Cedar Works will contract for six-mile drainage ditch; approximate yardage, 100,000; engineer in charge, G. P. Lewis, 420 Law Bldg. (See "Machinery Wanted.")

ELECTRIC PLANTS

Ark., Brinkley.—Brinkley Water & Light Co., J. W. Neff, superintendent, will change from direct to alternating current in electrical department and increase supplying capacity; add one boiler to present battery. (See "Water-works.")

Ark., Danville.—Danville Electric Co. contemplates installing boiler of 90 to 100-horsepower capacity.

Ark., Newark.—Town granted electric-light franchise to L. P. and W. J. Caldwell; they will build plant.

Fla., Chipley.—Chipley Light & Power Co., E. H. Hale, engineer in charge, is proceeding with construction of previously-described electric-light system; cost \$25,000; develop 200 horse-power. (See "Machinery Wanted.")

Fla., Lake Worth.—City will grant franchise to Percy Hagerman (of Colorado) to build light, water and ice plants.

Ga., Tallapoosa.—City, C. E. Pearce, Mayor (recently noted to vote on bonds September 13), will expend \$3500 on additional unit; 60-kilowatt generator. (See "Machinery Wanted.")

Ga., Toccoa.—Toccoa Falls Light & Power Co. will install emergency steam plant; will install 150-horse-power Corliss engine, 100 K. W. 2300-volt alternating current generator and switchboard equipment.

Ky., Clay.—Clay Light & Ice Co. will add 20-kilowatt alternating-current belt-driven generator and accompanying machinery, as recently stated; has not awarded contract for this additional equipment; C. R. Clark, manager. (See "Machinery Wanted.")

Ky., Olympia.—Olympia Springs Railway, Power & Light Co., capital \$50,000, incorporated by James D. Wilson, J. Frank Taylor and A. J. Hollier.

La., Baton Rouge.—City is considering construction of light plant and garbage incinerator. Address The Mayor.

La., Welsh.—City votes September 9 on \$15,000 bonds to build electric-light plant. Address The Mayor.

N. C., Newbern.—City will install following equipment: Arc-light machine in electric-light plant to cost \$3500; centrifugal pump with capacity 750 to 1000 gallons per minute at 85 R. P. M. against water pressure of about 65 pounds per square inch and arranged to be driven by direct connection to 75-horse-power electric motor; 50-light, 220 volts primary, 6.6 amperes, series arc rectifier outfits; F. T. Patterson, City Clerk, receives bids on pump and rectifier outfits until August 23. (See "Machinery Wanted.")

N. C., Rich Square.—Rich Square Electric Co., capital stock \$50,000, incorporated by M. Bolton, J. T. Bolton, R. B. Boyce and others.

Okla., Medford.—City will rebuild electric-light, power and water plants burned at estimated loss of \$12,000. Address The Mayor.

Okla., Soper.—Soper Electric Power Co., capital \$4500, incorporated by W. F. Breathwit, A. J. Steen and Jim Breathwit.

Tex., Burnet.—W. C. McDonald is interested in installation of lighting system; about 1000 lights. (See "Machinery Wanted.")

Tex., Park Place, P. O. at Houston.—Park Place Water, Light & Power Co., capital stock \$10,500, incorporated by G. J. McCarty, F. A. Tucker and Lewis Fogle.

Tex., Velasco.—Velasco Power Co., capital stock \$3000, incorporated by J. T. Dingle, D. T. Austin and P. F. Combs.

Va., Manassas.—City voted \$75,000 bonds

to construct electric-light plant, sewer system and water-works; engineer, Harry Stevens, Union Trust Bldg., Washington, D. C. (See "Sewer Construction.")

W. Va., Bluestone Junction (not a post-office).—Norfolk & Western Railway Co., L. E. Johnson, president, Roanoke, Va., has not yet determined all details for electric-power plant; Gibbs & Hill, engineers, Pennsylvania Terminal Bldg., New York, were recently mentioned as receiving building bids until August 8; building to be 160x135x60 feet, with reinforced concrete foundations and brick superstructure, containing electrical machinery for 27,000 kilowatts; has awarded contract for turbo-generators with accompanying equipment and for electrifying Bluefield-Vivian section, 85 miles long. (Previously noted.)

FERTILIZER FACTORIES

Ala., Brewton.—Robbins & McGowin Co. will establish fertilizer factory.

Ga., Savannah.—Nitro-Germ & Fertilizer Co., 27 Bay St. East (recently noted to establish plant to manufacture nitro-germ), states will establish laboratory and has ordered special equipment in Germany; Carl Teeling, president; P. Zipplies, secretary-treasurer.

Ga., Pinehurst.—Pinehurst Fertilizer Co., capital stock \$10,000, incorporated by G. W. Fullington, M. C. Peavy and F. A. Peavy; will erect plant; 50x150 feet; mill construction; daily capacity 100 tons dry mixing fertilizer. (See "Machinery Wanted.")

Md., Baltimore.—D. B. Martin Company, Gwynns Falls and Wilkens Ave., awarded contract to Consolidated Engineering Co., 61 Gunther Bldg., Baltimore, to erect plant building; four stories; concrete; composition roof; concrete foundation; steel, terra-cotta, sheet metal iron, plumbing; plans by C. B. Comstock, 110 W. 40th St., New York. (Recently mentioned.)

FLOUR, FEED AND MEAL MILLS

Tex., Azle.—Azle Gin & Milling Co. incorporated by W. N. McDonald and others. (See "Cotton Compresses and Gins.")

Tex., Burnet.—Burnet Roller Flour Mill, W. C. McDonald, president, awarded contract for installation of mill; daily capacity, 50 barrels flour and 200 bushels meal. (Recently noted.)

Tex., Dallas.—Stanard-Tilton Milling Co., St. Louis, Mo., awarded contract to Macdonald Engineering Co., Monadnock Bldg., Chicago, Ill., to construct plant; engineering company writes to Manufacturers Record: "Plant will represent investment exceeding \$500,000; plant to include flour mill, 2500 barrels daily capacity; 300,000-bushel grain elevator with equipment for 25 cars daily; power-house equipped with internal-combustion engines of 500 horse-power; warehouse with 300,000 square feet floor area; office building; storage tanks; transfer tables." Macdonald company wires Manufacturers Record: "Mill 50x200 feet, six stories; warehouse, 40 feet wide on three sides of mill, length 480 feet, one story high; power-house 30x70 feet, one story; elevator 41x170 feet, 100 feet high; power, about 1000 horse-power; complete equipment and machinery to cost \$125,000." (Previously reported as to build \$150,000 mill.)

FOUNDRY AND MACHINE PLANTS

Ala., Fayette.—Blacksmith Shop.—E. A. Bagwell will rebuild burned blacksmith shop; brick construction.

Ga., Adairsville.—Machine Shop.—Joe P. Bowdoin will erect \$2500 50x58-foot machine shop and auto repair building; gravel roofing; plans and construction by owner. (Recently noted under "Stores.")

Md., Hagerstown.—Sand-blast Machinery.—Pangborn Corporation, capital stock \$50,000, incorporated by Thomas W. Pangborn, John C. Pangborn and Harry D. Gates.

Mo., St. Joseph.—Railway Car Brakes.—Automatic Car Brake Co., 2613 S. 18th St. (recently noted incorporated, \$100,000 capital stock), advises is now letting manufacturing contracts to local foundries, etc., but contemplates erection of plant; no plans matured; C. E. Rochambeau, president and manager; Geo. B. Wandling, vice-president and treasurer; R. A. Raymond, secretary; manufacture railway car brakes.

Mo., St. Louis.—Cars.—American Car & Foundry Export Co. incorporated by John M. E. Ames of New York, William H. Hager, Roselle, N. J., and Charles S. Gawthrop of Wilmington, Del.; to handle export trade of American Car & Foundry Co., having plants at St. Louis and St. Charles, Mo.

Okla., Oklahoma City.—Machinery.—J. S.

Wylie Company, capital stock \$10,000, incorporated by J. S. Wylie, S. K. Bernstein and Gunnell Moore.

Okla., Oklahoma City.—Threshers.—D. A. Radle of Elk City, Okla., and J. R. Thompson of Vinson, Okla., will establish plant to manufacture kafir corn threshers.

Tenn., Nashville.—Stoves.—Hermitage Hygienic Heating Co., capital stock \$20,000, incorporated by E. J. Parker, S. C. Carmack, W. R. Roach, Ralph Darity and Charles L. Cornelius; succeeds International Hygienic Heating Co. of Florence, Ala.; will manufacture heater; temporary offices at 602 Stahlin Bldg.

Tex., Houston.—Iron Works.—Vulcan Iron Works (recently reported incorporated with \$16,800 capital stock by J. Wood and others) will build one-story frame machine shop; cost \$2550.

W. Va., Clarksburg.—Smelter.—General Smelting Co., capital stock \$25,000, incorporated by Harold A. Daune of Clarksburg, Howard Elster, R. S. Lemon, L. L. Aultz and Howard B. McMunkin of Charleston, W. Va.

GAS AND OIL ENTERPRISES

Ky., Louisville.—Gas-pipe Line.—Kentucky Pipe Line Co. has capital stock of \$2,000,000 and authorized bond issue of \$3,000,000; awarded contract to Pittsburgh Engineering & Construction Co., Pittsburgh, Pa., to construct gas-pipe line (about 200 miles long) from West Virginia fields to Louisville; use 12-inch piping; this material and construction (labor) to cost about \$3,000,000; Louisville Gas & Electric Co. (controlling Kentucky Pipe Line Co.) will build belt line around Louisville and regulating station. (Other details heretofore stated.)

La., Lake Charles.—Gas Plant.—City is prepared to grant gas franchise; bids opened September 11; G. L. Rilling, Mayor. (See "Machinery Wanted.")

La., New Orleans.—Pioneer Oil Development Co., capital stock \$50,000, incorporated by J. I. Rogers, L. L. Cohen, A. DeJue, G. A. Bryant and others.

La., Shreveport.—Tri-State Oil & Gas Co., capital stock \$25,000, incorporated; J. S. Handford, president, Fort Worth, Tex.; J. W. Atkins, vice-president, Shreveport; E. H. Glenn, treasurer, Batesville, Ark.; R. E. Allison, secretary, Shreveport.

Okla., Alva.—Alva Wayside Oil & Gas Co., capital stock \$10,000, incorporated by C. T. White, G. P. Forbis, G. Willers, E. Westling and J. W. Atkinson.

Okla., Anadarko.—Caddo Oil & Gas Co., capital stock \$22,000, incorporated by W. W. Terry of Anadarko and H. E. Robinson and M. B. Blake of Oklahoma City, Okla.

Okla., Apache.—Byam-Benedict Oil Co., capital stock \$25,000, incorporated by A. N. Benedict and W. S. Yoder of Apache, T. O. Glick and James S. Watson of Oklahoma City, Okla.

Okla., Klefer.—Whitman Oil Co., capital \$10,000, incorporated by F. E. Bennett, P. H. Bennett and Edward Green.

Okla., Oklahoma City.—Grant-Lyle Oil & Gas Co., capital stock \$8000, incorporated by H. Ludlow and H. S. Clark of Oklahoma City, B. M. Grant and D. C. Lyle of Atlanta, Ga.

Okla., Poteau.—Sugar Loaf Oil & Gas Co., capital \$15,000, incorporated by D. W. Patton, Tom Hale and I. G. Well.

Okla., Tulsa.—Chemical Oil Co., capital \$25,000, incorporated by P. A. Wissman, F. L. Thompson and H. A. Woodward.

Okla., Tulsa.—Whites Oil & Gas Co., capital \$20,000, incorporated by G. H. White and Grace I. White, Enid, Okla., and Hoyt F. White, Tulsa.

Tex., Hondo.—Hondo Oil & Development Co. organized with H. E. Haass president, M. A. Keller vice-president, A. P. Sale secretary-general manager, F. Davis treasurer; develop 60 acres in Caddo oil field.

Tex., Houston.—Tames Oil Co., capital stock \$10,000, incorporated by T. J. Lawhon, J. M. Powers and C. H. Lane.

Tex., Van Horn.—Texas Gulf Oil Co., capital stock \$50,000, incorporated by S. W. White, R. S. Hicks and Mrs. Bettie White.

Tex., Wichita Falls.—Carson Oil Co., capital stock \$2750, incorporated by John P. Daggett, H. Graves, F. P. Carson and others.

W. Va., Charleston.—Oil Refinery.—Blue Creek Refining & Manufacturing Co. incorporated by Frank A. Smith, Hugh A. Rader, Samuel R. Reynolds and others.

W. Va., Charleston.—Hamilton Natural Gas Co., incorporated by Frank A. Smith, Hugh H. Rader, Sam R. Reynolds, James L. Long and others.

W. Va., Harvey.—Floyd Oil & Gas Co., capital stock \$10,000, incorporated by W. P. Floyd, M. P. Wiswell, O. M. Brown, H. A. Koontz and G. Crowder, all of Huntington, W. Va.

W. Va., Parkersburg.—Southern Petroleum Co., capital stock \$25,000, incorporated by W. J. Dent, M. W. Miller, J. H. Oatey, Joseph Hawk and others.

W. Va., Parkersburg.—Gas Plant.—Godfrey L. Cabot of Boston, Mass., is considering securing of franchise to furnish city with gas.

ICE AND COLD-STORAGE PLANTS

Ala., Ensley.—Steel City Ice Co., capital stock \$3000, incorporated; F. J. Lange, president; C. F. Lange, vice-president; F. W. Lange, secretary-treasurer.

Fla., Chipley.—Chipley Light & Power Co., C. H. Hale, engineer, contemplates installation of 10-ton ice plant. (See "Machinery Wanted.")

Fla., Fort Myers.—Southern Land & Investment Co. plans to establish ice factory. (See "Machinery Wanted.")

Fla., Lake Worth.—City will grant franchise to Percy Hagerman (of Colorado) to build ice, light and water plants.

Fla., Orlando.—Orlando Ice Co. will increase capacity of plant from 20 to 60 tons; has plans to install 40-ton daily capacity equipment. (Lately mentioned.)

Fla., Tarpon Springs.—Citizens' Ice & Light Co., capital stock \$25,000, organized by I. B. Read, J. K. Cheyney, L. S. Fernald, L. A. Van Winkle and others.

Ky., Paris.—Paris Ice Manufacturing Co. will build addition to plant and install machinery having daily capacity of 30 tons; present daily capacity, 170 tons.

Ky., Parks Ferry, P. O. at Carlisle.—W. F. Clark and associates will establish ice plant; install equipment in planing mill building.

Md., Cumberland.—German Brewing Co. will make improvements to plant costing \$75,000, including construction of 100-ton ice plant with filters and water distillers; will also enlarge storage plant; Richard Geisser, architect, Chicago, Ill., prepared plans for buildings to be of concrete and brick construction.

N. C., High Point.—George E. Brett of Indianapolis, Ind., contemplates, it is reported, building ice and cold-storage plant; can be addressed at High Point, care of C. D. Smith.

Tex., Burnet.—Burnet Roller Flour Mill, W. C. McDonald, president, contemplates installation of five-ton ice plant. (See "Machinery Wanted.")

W. Va., Logan.—Logan Ice & Storage Co., Chas. Bennett, president (recently noted incorporated, capital stock \$50,000, and to build ice plant), states will soon open proposals on fireproof building.

W. Va., St. Albans.—Campbell Ice Co., capital stock \$25,000, incorporated by J. W. Campbell, Myron G. Campbell, J. Albert Campbell and others.

IRON AND STEEL PLANTS

Mo., St. Louis.—Iron Furnaces, etc.—St. Louis Iron & Steel Co., capital stock \$3,500,000, incorporated by Norman P. Coffin, Wm. J. Maloney and Osevar J. Reichard; company's attorney is Warren B. Wilson, Harris Trust Bldg., Chicago, Ill.

LAND DEVELOPMENTS

Ala., Gadsden.—Brannon Realty Co., capital stock \$30,000, incorporated with F. M. Brannon, president, and T. A. Stringer, vice-president, both of Gainesville, Fla.; L. L. Copeland, secretary, Gadsden, Ala.; will develop 110 acres land as residential suburb; will construct streets, build concrete sidewalks, etc. (Recently mentioned.)

Ark., Fayetteville.—Johnson Orchard Co., capital stock \$20,000, incorporated by W. S. Johnson (president), J. R. Johnson, C. F. Adams and Ernest Walker.

Fla., Fort Myers.—Starnes-Darrow Land Co. incorporated by C. L. Starnes, E. A. Darrow, G. Hunter Bryant and Walter Kaune; will develop 50 acres land as residential section.

Florida.—Thompson & Jackson, Toulon, Ill., Southern office at 505 Atlantic National Bank Bldg., Jacksonville, Fla., purchased (from Florida Coast Line Canal & Transportation Co.) about 125,000 acres land on East Coast, mainly in Dade, Palm Beach, St. Lucie, Brevard and St. Johns counties; contemplates incorporation in Florida as Prudential Land Co. (holding company); later will develop lands for market.

Fla., Jacksonville.—Hubbard-MacDuff Company, capital stock \$50,000, incorporated; A. S. Hubbard, president-treasurer; S. B. Hubbard, vice-president; W. R. MacDuff, secretary.

Fla., Jacksonville.—Guaranty Land Co., F. O. Miller, president, 39 W. Forsyth St. (recently noted incorporated, capital stock \$20,000), will develop about 68 acres ocean front property about 19 miles from Jacksonville.

Fla., Long Boat.—Street Lightfoot of Tampa, Fla., purchased Long Boat Key and will develop as summer and winter resort; improvements will include deepening and bulkheading of Stone Crab bayou, paved streets, concrete sidewalks, artesian wells, telephone system, 100-room hotel, bathhouses, bathhouses, etc.; main street from bay to gulf is now improved with shell roadway and concrete sidewalk.

Fla., St. Augustine.—Fuller-Wood Development Co., C. M. Fuller, president, will develop 52 acres of land near St. Augustine as subdivision. (Recently noted incorporated with \$75,000 capital stock.)

Fla., St. Petersburg.—Shores Acres Land Co., capital stock \$50,000, incorporated; G. W. Blodgett, president; Arthur B. Brayton, first vice-president; H. C. Dent, second vice-president; C. E. Chambers, secretary; R. H. Thomas, treasurer.

Ga., Athens.—Georgia Development Co. (Blanton E. Fortson, W. H. Shelton, John J. Wilkins and others) will develop 60 acres land as subdivision; lay 1400 feet granolithic sidewalk to drainage ditch to dispose of surface water.

Ga., Savannah.—Avondale Development Co., Cornelius F. Moses, president, is proceeding with proposed development as residential suburb of property containing 980 lots; surveyed streets and begun grading under supervision of T. J. Thomas; will construct private water system supplied by artesian wells, to include water tank with capacity of 30,000 gallons, pumping station and system of mains.

La., Lockport, R. R. No. 1.—Portugals Land Co., Frank M. Pritchett, president, recently noted incorporated (under St. Ludivim), capital stock \$5000, will develop 1301 acres for cultivation; expend \$25,000 at rate of \$5000 per year; Mr. Pritchett in charge.

La., New Orleans.—Fidelity Development & Investment Co., capital stock \$100,000, incorporated by William H. Heyl, Ernest J. Coulon and J. Wilfred Galdry.

La., New Orleans.—New Orleans Suburban Land Co., capital stock \$1,000,000, incorporated by Julius F. Funk, A. E. Demange, Ralph C. Demange and J. Dwight Funk.

Miss., Gulfport.—Gulf Coast Land Co. organized with S. A. Tomlinson president, M. Lyle vice-president; W. A. Cox secretary-treasurer; owns 15,000 acres land and will develop.

Mo., Joplin.—Midway Land & Investment Co., capital stock \$2500, incorporated by A. H. Forsythe, A. W. Thurman and Catherine H. Scott.

Mo., St. Louis.—Edward K. Love Realty Co., G. H. Dudley, trustee, will develop subdivision in Washington Heights section to be known as Washington Heights Second Addition; about 5000 front feet; awarded contracts for street improvements, to be executed under supervision of J. T. Doods, including granite sidewalks, curb and gutter; water-works, sewer system, gas plant and Telford streets.

Mo., Sullivan.—Corn Belt Land & Development Co., capital stock \$50,000, incorporated by John H. Fisher, Leo H. Fisher and S. E. Newhouse.

N. C., Bloomsbury, not a postoffice.—Jas. H. Pou, 210 Tucker Bldg., Raleigh, N. C., has subdivided and laid out suburban property about one-half mile from Raleigh; will receive bids on water and sewer construction. (See "Sewer Construction and Water-works.")

N. C., Charlotte.—Patterson & Glascock, selling agents of Stephens Company, purchased six acres between Hermitage Rd. in Myers Park and Providence Rd. and will develop as residential suburb — Parkwood Place; improvements including paving, sewer, water, etc., now progressing; engineers, Blau & Drane, Commercial Bldg., Charlotte.

N. C., Wilmington.—Highwood Park Co.'s property of 115 acres (previously noted to be developed for residential purposes) is being laid out by W. H. Banck, Garrell Bldg., Wilmington; improvements to include

streets, water mains, sewers, sidewalk and planting of shade trees and shrubbery; H. P. Wilder, president of company.

S. C., Orangeburg.—Sandel Farming & Investment Co., capital stock \$2000, incorporated by J. W. Sandel and L. C. A. Roessler.

Tex., Mercedes.—Mercedes Development Co., capital stock \$2500, incorporated by William Lingenbrink, F. D. Lamb, D. H. Kennet and others.

Tex., Van Horn.—Van Horn Valley Land & Railway Co., capital stock \$1,500,000, incorporated by R. H. Owen, Minneapolis, Minn. (president), J. M. Daugherty, J. Y. Canon and Joe Irby, all of Van Horn; plans to develop 500,000 acres land contiguous to Texas & Pacific Railway and construct railway through Van Horn valley. President Owen wires Manufacturers Record: "Railway to be standard gauge, 60 miles long; cost approximately \$10,000 per mile; land in valley underlain with water at shallow depths, convenient for irrigation by pumping; lands to be developed by installing pumps and sold in units of 40 acres and upwards." Land is adapted for general agriculture; valley lies at 3800-foot level, with 6000 to 8000-foot mountain on either side; drainage area 2500 square miles.

Va., Charlottesville.—Kenemore Farms Corporation, capital stock \$10,000, chartered; K. I. Guest, president; E. P. Guest, secretary.

Va., Monterey.—H. M. Lewis of Staunton, Va.; A. V. Huyler of New York and others purchased Bolar Spring and will develop summer and health resort; will organize company with maximum capital stock of \$50,000; proposed to improve grounds, erect hotel, sell water, etc.

Va., Petersburg.—Petersburg Lot Corporation, capital stock \$10,000, incorporated with H. P. Stratton president, T. Marshall Bellamy vice-president, S. H. Turner secretary-treasurer.

W. Va., Bluefield.—Bluefield-Graham Fair Association, E. C. Banks, secretary, organized to conduct fair, racing and amusement park; contemplates track and training stables for more than 100 horses; location, Sulphur Springs, on Virginia and West Virginia State lines; plans include summer hotel, artificial lake, county clubhouse, golf link course and sanitarium.

W. Va., Paw Paw.—Okonoko Orchard Co., capital stock \$25,000, incorporated by James U. Kirk and J. Raymond Kirk of Paw Paw; John J. Hildinger, Charles F. Dahlstrom and Charles S. Johnson of McKeesport, Pa.

LUMBER MANUFACTURING

Ala., Anniston.—C. H. Green will build sawmill with capacity of 20,000 feet.

Ala., Ashville.—Brannon & Thompson Lumber Co. will build sawmill with capacity of 20,000 feet; machinery purchased.

Ala., Attalla.—R. F. Lumber Co., C. B. Forman, president, will make improvements to plant acquired from Attalla Lumber Co.; at present will occupy main buildings and use machinery of former company. (Recently noted incorporated with \$15,000 capital stock.)

Ark., Brinkley.—W. H. Overholt of Chicago, Ill., purchased 760 acres land near Brinkley and will build sawmill.

Ga., Fitzgerald.—Garrant Lumber Co., capital stock \$50,000, incorporated by T. J. and Don Dickey of Fitzgerald and W. F. Boyd of Douglas, Ga.; will build sawmill.

Ky., Blackey (not a postoffice).—Hon & Tomlinson of Winchester, Ky., will build sawmill on Elk creek in Letcher county; develop timber land.

Ky., Louisville.—City Mill & Lumber Co., capital \$25,000, incorporated by G. Y. Heatt, H. J. E. Scheirich and S. M. Long, Jr.

Ky., Woolum.—Clay County Land & Lumber Co., recently noted incorporated (under Ky., Pineville) with \$30,000 capital stock, will operate plant with daily capacity 50 logs; Dr. E. M. Howard, president; M. D. Smith, vice-president; G. T. Howard, secretary; W. W. Eager, treasurer; M. D. Smith, Harlan, Ky., manager.

La., New Orleans.—J. G. Rainwater Lumber Co., capital stock \$25,000, incorporated by J. G. Rainwater, Irene S. Rainwater, John M. Upton and Lucy P. Cooper.

La., Vinton.—E. Elms of New Orleans, La.; D. M. Scott and T. D. Bonfield of Detroit, Mich.; Frank Jarney and Al Powers of Chicago, Ill., will, it is reported, build sawmill.

La., Wadesboro.—Brogan Lumber Co. contemplates adding drykiln.

Miss., Chicora.—Robinson Land & Lumber Co., Mobile, Ala., will build sawmill with daily capacity 75,000 feet to replace burned plant; install single band and resaw.

Miss., Jackson.—Robinson Lumber Co. will build hardwood mill.

Miss., Lake.—G. B. Merrill & Bro. will rebuild double band mill reported burned at loss of \$60,000; character of machinery not determined.

Miss., Laurel.—Marathon Lumber Co., Wausau, Wis., will establish sawmill with daily capacity 125,000 feet; purchased 50,000 acres timber land in Newton, Jasper, Smith and Scott counties. (Previously mentioned.)

Mo., Kansas City.—Mercantile Tie & Timber Co., capital stock \$10,000, incorporated by U. S. Epperson, H. A. Thompson and Harry W. Jaques.

Mo., Deering.—Wisconsin Lumber Co., F. R. Gadd, vice-president, Chicago, Ill., will build sawmill; band and resaw type.

Mo., St. Louis.—Van Cleave Sawmill Co. increased capital stock from \$10,000 to \$25,000; will increase equipment of plant.

N. C., Linwood.—Miller Manufacturing & Lumber Co., capital stock \$100,000, incorporated by John L. Miller and Leroy Miller of Linwood and Annie Miller Long of Greensboro, N. C.

N. C., Tarboro.—The Lumber Co., capital stock \$100,000, incorporated by F. M. Carlisle, A. D. Fowlkes and the Macclesfield Company.

Tex., Richland.—Richland Lumber Co., capital stock \$25,000, incorporated by W. G. Herrington, C. C. Calloway and Cecil Smith.

Va., Suffolk.—Truitt-Cramer-Dill Company will build sawmill with daily capacity 60,000 feet; owns 120,000 acres timber land, lumber from which will be manufactured at Suffolk plant.

W. Va., Huntington.—J. L. Caldwell advises he did not purchase 10,000 acres mineral and timber land; recent report was erroneous.

W. Va., Randolph County.—West Virginia Spruce Lumber Co., Marlinton, W. Va., purchased 1200 acres timber land on headwaters of Tygart's Valley River.

METAL-WORKING PLANTS

N. C., Durham.—Hogsheads.—Metal Tobacco Hogshead Co., capital stock \$20,000, incorporated by B. E. Byrd, J. B. Mason, W. T. Umstead and W. M. Fallon; C. W. Byrd, secretary, states company will not erect factory; will use sheet-iron for metal tobacco hogsheads, which will be manufactured in local machine shop. (See "Machinery Wanted.")

MINING

Ala., Sylacauga.—Marble.—Alabama Marble Co. will double capacity of plant; J. S. Sewell of company wires Manufacturers Record: "Enlargement of quarry under consideration, but nothing finally authorized."

Ark., Bauxite.—Bauxite.—Norton Company, Milton P. Higgins, president, Worcester, Mass., will build \$25,000 bauxite plant; J. Felton Gibbons is Arkansas agent.

Ark., Butterfield.—Whetstone.—American Stone Co., Floyd's Knob, Ind., is receiving bids on machinery for plant recently noted (under Ark., Little Rock); 80 acres partially developed. (See "Machinery Wanted.")

Ky., Salem.—Fluorspar.—American Spar Co., Wheeling, W. Va. (recently noted incorporated, capital stock \$25,000), will develop about 500 acres; daily capacity, 100 tons; no machinery needed at present; Geo. W. Woods, president; J. C. Hearne, vice-president; R. A. McCabe, secretary-treasurer; Thos. H. B. Haase, manager. (See "Machinery Wanted.")

Mo., Carl Junction.—Lead and Zinc.—Lilly C. Mining Co. (C. C. Weaver, E. F. Oberg and others) will develop mining property; install steam hoist.

Mo., Galena.—Lead and Zinc.—Illinois Lead & Zinc Co. will develop 150-acre mining lease; build 200-ton concentrating plant.

Mo., Joplin.—Lead and Zinc.—Granby Mining & Smelting Co. will develop mining property and build concentrating plant.

Mo., Joplin.—Silicate, etc.—Morgan & Co. will develop 15-acre lease containing silicate, lead and zinc deposits.

Mo., Joplin.—Lead and Zinc.—Sturn, Roberts & Smith Mining Co., capital stock \$100,000, incorporated by S. T. Sturn, C. A. Roberts, Thomas C. Clary and others.

Mo., Neek City.—Lead and Zinc.—Century Mining Co. will develop mining property; may build concentrating plant.

Mo., Sarcosie.—Lead and Zinc.—Grasselli Chemical Co. of Joplin, Mo., and Cleveland, O., leased mining property, including mine and 70 acres land; will develop.

Mo., Spurgeon, R. F. D. from Neosho.—Lead and Zinc.—John Malang of Joplin,

Mo., secured contract to drill 1000 feet on George A. Moore land, four miles east of Spurgeon.

Mo., Thoms Station, R. F. D. from Webb City.—Lead and Zinc.—Lagonda Mining Co., Lagonda, Mo., contemplates building 100-ton mill; acquired lease and other mining property of Mohawk Mining Co., including lease and mine on Mexico-Joplin land at Thoms Station.

N. C., Gold Hill.—Gold.—Gold Hill Consolidated Co., Walter George Newman, president, will resume gold mining developments; Mr. Newman states he has located outcropping of vein two feet wide of high percentage.

Tenn., Nashville.—Gravel.—Tennessee Gravel Co., capital stock \$250,000, incorporated by T. A. Clarkson, Charles B. Wilson, C. W. Grant and others; Mr. Clarkson wires Manufacturers Record: "All machinery installed and plant about complete; ready on September 1 to deliver 2000 yards daily."

MISCELLANEOUS CONSTRUCTION

Fla., Sanford.—Bulkhead.—City plans to construct bulkhead on Lake Monroe. Address The Mayor.

Fla., Tampa.—Harbor Improvements.—W. H. Bixby, chief of United States Engineers, and Henry Breckinridge, acting Secretary of War, Washington, D. C., approved plans of Tampa Port Commissioners, M. W. Caruth, president, for proposed development of estuary of Ybor channel; city will now arrange to secure deepening of main ship channel as provided for in Rivers and Harbors' bill passed by Congress, and Government engineers under direction of Capt. O. N. Ble will probably soon begin surveys.

Ky., Louisville.—Creek Improvement.—Board of Public Works decided upon plans and specifications for Beargrass Creek Improvement; construction to include concrete channel and reinforced concrete retaining walls, etc.; receives bids until August 28. (See "Machinery Wanted.")

La., Donaldsonville.—Dam.—State Board of Engineers, 213 New Orleans Court Bldg., New Orleans, La., awarded contract to Hampton Reynolds to construct dam across headwaters of Bayou Lafourche at Donaldsonville, to contain 45,000 cubic yards; to Abney & Pearce to build Sunflower Levee on Red River, Bossier parish.

La., Tallulah.—Board of Commissioners Fifth Louisiana Levee District, O. W. Campbell, secretary, will enlarge Reid-Biggs levee, about 400,000 cubic yards; also Bayou Roundaway levee, about 50,000 cubic yards; bids received until August 20. (See "Machinery Wanted.")

Miss., Clarksdale.—Levee.—Levee Board asks bids until August 19 for levee enlargement: Sections 1 to 7—645,000 cubic yards; sections 69, 70, 71—375,000 cubic yards; section 12H—125,000 cubic yards; on section 16H—52,000 cubic yards; T. G. Dabney, City Engineer. (See "Machinery Wanted.")

Miss., Greenville.—Mississippi Levee Commissioners will construct about 45,000 cubic yards sub-levees (within 1½ miles) and 79,000 cubic yards levee enlargement (within 1 mile); bids received until September 8; W. L. Thompson, chief engineer. (See "Machinery Wanted.")

Miss., Vicksburg.—Lock and Dam.—Engineers of War Department, Washington, D. C., approved revised estimate of cost of constructing proposed lock and dam in Sunflower River, and instructed district engineer at Vicksburg to proceed with work; estimated cost \$500,000.

Mo., St. Louis.—Revetment.—Board of Public Improvements awarded contract to J. W. McMurry Construction Co. of Kansas City, Mo., at \$167,430 to construct stone revetment and mattresses along eastern bank of Mississippi River. (Call for bids lately noted.)

Mo., Waverly.—Dike and Revetment.—United States Engineering Office, Herbert Deakne, Major, Engineers, Kansas City, Mo., asks bids, received until September 11, for construction of about 3600 feet three-row timber dike and 10,000 feet revetment on Missouri River, 50 and 96 miles below Kansas City and two miles above and four miles below Waverly.

N. C., Beaufort.—Inland Waterway.—Army Engineers Corps, Washington, D. C., submitted report to Congress favoring inland waterway from Boston, Mass., to Beaufort. Report favors: The purchase of Chesapeake and Delaware Canal, connecting Chesapeake and Delaware bays, at \$2,514,290; \$3,000,000 to transform canal from lock into sea-level canal, with depth 12 feet throughout and

90 feet width at bottom; postponement of ultimate deepening of canal to 25 feet until effect of 12-foot canal upon commerce is apparent; construction of lock canal 12 feet deep and 90 feet wide from Delaware River to New York harbor at cost of \$20,000,000, built to provide for economical enlargement to 25 feet depth and 125 feet width, and future reduction of canal to sea-level basis; ultimate development into 25-foot deep sea-level canal in co-operation with New Jersey and other benefited States. Congress has appropriated funds to buy Albemarle and Chesapeake Canal, connecting Norfolk and New York by inland waterway route to North Carolina sounds, and giving inside route beyond Cape Hatteras. Gen. W. H. Bixby, Chief of Engineers, recommends that Government begin construction of 12-foot lock canal. Estimates as follows: Lock canal, 12 feet deep, \$20,000,000; annual operating cost, \$610,000; lock canal, 25 feet deep, \$30,000,000; annual operating cost, \$720,000; sea-level canal, 12 feet deep, \$33,000,000; annual operating cost, \$270,000; sea-level canal, 25 feet deep, \$45,000,000; annual operating cost, \$320,000.

N. C., Raleigh — Heating Plant. — State Board of Buildings and Grounds awarded contract to W. B. Barrow of Raleigh at \$11,487 to erect building for central heating plant; also awarded contract to American Heating Co., Charlotte, N. C., to install plant at \$15,428; board rejected bids for lighting equipment. (Call for bids lately noted.)

N. C., Wilmington. — Government will dredge in Cape Fear River at and below Wilmington; bids received at United States Engineer office until September 18; H. W. Strickle, Major, Engineers. (See "Machinery Wanted.")

N. C., Wilmington — Steamship Terminals. — Wilmington Terminal Co., authorized capital \$100,000, incorporated to acquire terminal property to be leased to Clyde Steamship Co.; purchased land, but has no definite plans for improvements; main office at 11 Broadway, New York; president, Henry R. Mallory, president Mallory Steamship Co.; vice-president, H. H. Raymond, vice-president and general manager of Clyde Steamship Co., Pier 36 North River; both of New York; secretary-treasurer, A. R. Nicol. (Lately noted.)

S. C., Charleston — Water-front Improvements. — Navy Department, Washington, D. C., awarded contract at \$284,200 to Snares & Triest Company, 233 Broadway, New York, for water-front improvements; plans provide for concrete pier 45x800 feet, causeway pier 41x390 feet, 900-foot quay wall and outer pier 56x710 feet.

Tex., Texas City — Channel Improvements. — Government authorities at Washington approved plans and specifications for proposed construction of dike and widening and deepening channel; dike to be 28,200 feet long, from harbor line at Shoal Point to deep water in Bolivar Roads, built of creosoted round piling bound together with walling; either end of dike to be rounded in hook form to prevent undermining; Texas City channel to be deepened to 30 feet throughout and widened to 300 feet; spoil from dredging to be deposited behind dike. As emergency measure, Government will begin dredging work at once on Texas City channel, so as to provide minimum depth of 25 feet throughout entire length by September 1; Col. C. S. Riche, Galveston, Tex., is United States engineer in charge of district.

W. Va., Sistersville — Dams. — War Department, Washington, D. C., awarded contract to T. A. Gillespie Company of Pittsburgh, Pa., to construct dams Nos. 16 and 17 in Ohio River between Sistersville and Marietta, O.

MISCELLANEOUS ENTERPRISES

Ala., Birmingham — Laundry. — Acme Laundry Co. purchased site 150x140 feet on which to build steam laundry; two stories; plans being prepared.

Ala., Mobile — Publishing. — Post Publishing Co., capital stock \$15,000, incorporated; W. P. Cothran, president; Charles H. Allen, vice-president-general manager; T. Douglas McMillan, secretary-treasurer.

Fla., Lake City — Laundry. — A. W. DeCamp of Ocala, Fla., will establish steam laundry.

Fla., Tampa — Rock Crushing. — West Coast Rock Co. expects to install considerable additional new machinery to crush rock for road construction.

Fla., Tampa — Laundry. — Gaines & Paine Co., capital stock \$10,000, incorporated; E. S. Paine, president; G. R. Gaines, secretary-treasurer.

Ga., Atlanta — Safes and Vaults. — Bankers' Safe & Vault Co., capital stock \$10,000, incorporated by R. W. Ellis, J. E. Williams and W. H. Owen; to deal in and install safes, vaults, etc.

Ga., Athens — House Moving. — Caskey House Moving Co., capital stock \$500, incorporated by J. W. Caskey and others.

La., Baton Rouge — Garbage Incinerator. — City is considering construction of garbage incinerator and light plant. Address The Mayor.

Miss., Vicksburg — Construction. — S. R. Hughes Construction Co., capital stock \$10,000, incorporated by S. R. Hughes and M. D. Landau of Vicksburg and W. J. Shackelford of Greenville, Miss.

Mo., Kansas City — Construction. — B. C. S. Construction Co., capital stock \$200, incorporated by L. B. Brown, F. G. Cudworth and C. J. Staker.

Mo., Napoleon — Grain Elevator. — Napoleon Elevator Co. has begun erection of building to cost within \$6000; frame ironclad structure; first story brick; architect, F. E. Parker, 604 Kemper Bldg., Kansas City, Mo.; contractor, Herman Wille, Wellington, Mo.; G. F. Oberhelman, president; August Telgemeier, vice-president; Sam T. Ellis, secretary; A. F. Wegener, treasurer and manager; machinery plans not decided. (Recently noted incorporated, capital stock \$10,000.)

Mo., St. Louis — Mineral Water. — Columbia Mineral Water Co. incorporated by Edgar W. Stutz, Patrick J. Fitzgerald, Sr., Patrick J. Fitzgerald, Jr.; capital stock, \$20,000.

Mo., St. Louis — Garbage Reduction. — Indiana Reduction Co. will build chemical reduction plant.

N. C., Charlotte — Distributing Station. — Standard Oil Co. (main office, 26 Broadway, New York) purchased site on which to build storage and distributing yards, to include office building, reservoirs, tanks, stables and other required structures; will build seven oil tanks with storage capacity of 150 to 350 barrels oil; J. A. Fricker is in charge of Charlotte office.

N. C., Creedmoor — Publishing. — Creedmoor Publishing Co., capital stock \$25,000, incorporated by R. H. Rogers, W. B. Lasley, L. E. Harris and others.

N. C., Raleigh — Laundry. — S. Brown Shepherd will erect building to contain laundry, etc. (See "Stores.")

S. C., Charleston — Stevedoring. — Carolina-Georgia Stevedoring Co., capital stock \$10,000, incorporated by N. M. O'Rourke and George F. von Kolnitz, Jr.

S. C., Columbia — Navigation. — Columbia Railway & Navigation Co., capital stock \$50,000, incorporated by G. A. Guignard, T. C. Williams and F. S. Terry.

Tenn., Humboldt — Laundry. — E. E. Bodkin purchased American Steam Laundry; will completely overhaul and put in operation.

Tex., Mount Pleasant — Crematory. — City votes September 16 on \$20,000 bonds for crematory and city hall. Address The Mayor.

Va., East Radford. — Radford News, recently noted (under "Radford") incorporated with \$10,000 capital stock, will install newspaper equipment; John T. Maginnis, president and manager; W. Kuhn Barnett, vice-president; W. H. Maginnis, secretary-treasurer.

Va., Richmond — Construction. — Dennell Construction Co., capital stock \$200,000, incorporated with R. A. Dennell of Brooklyn, N. Y., president; H. L. Bell, secretary, San Francisco, Cal.

W. Va., Montgomery — Publishing. — Miners' Herald Publishing Co., capital stock \$10,000, incorporated by T. J. Davis of Montgomery; M. B. Coulter, George Save and Charles Hamilton of Fayetteville, W. Va., and others.

MISCELLANEOUS FACTORIES

Ala., Selma — Spark Plug. — William T. Benson, G. G. Vaughan and H. A. Vaughan will establish assembling plant to manufacture V-B spark plug for use on automobiles, motor cycles, etc.

Fla., Kissimmee — Bakery. — Niemeyer and McLaughlin will establish bakery; buildings secured; will install machinery.

Fla., Palatka — Explosives. — A. T. Milteer of Winterhaven, Fla., will build plant to manufacture explosives.

Fla., Tampa — Fire Apparatus. — Haney Fire Apparatus Co., 603 Citizens' Bank Bldg. (recently noted as awarding contract for erection of four \$25,000 buildings for factory), advises Manufacturers Record: Not ready at present to give out detailed information;

Edwin F. Haney, president; Harry Jacoby, vice-president; G. K. Haney, secretary; Edwin Olds, manager.

Ky., Louisville — Fruit Jars. — White Crown Fruit Jar Co., capital stock \$250,000, incorporated by J. L. Craig and Otis W. Pickrell of Louisville, Julius F. Funk, Jesse A. Rice and W. K. Bracken of Bloomington, Ill.; to manufacture fruit jars, lids, etc.; contemplates establishing \$250,000 to \$300,000 plant.

Ky., Louisville — Gates. — Perfection Gate Co., capital \$500, incorporated by E. H. Smith, B. F. Weltzel and John H. Isert.

La., Donaldsonville — Sugar. — Belle Helene Co-operative Sugar Co., capital stock \$50,000, incorporated; purchased Belle Helene sugar factory in Fifth Ward and will operate; Joseph Staring, president; C. D. Gondran, vice-president; Achille I. Picard, secretary-treasurer.

Md., Baltimore. — F. Schlemer, Jr., secured permit to erect brick factory building at 1013 E. Pratt St.

Md., Baltimore — Greases. — Sherwood Bros., Bank and 8th Sts., awarded contract to Philip Hiltz, 3514 Gough St., Baltimore, to build addition to plant; brick, concrete and structural steel; will use portion of addition to manufacture greases and portion for oil storage. (Recently mentioned.)

Md., Cumberland — Glassware. — Wellington Glass Co. contemplates increasing capital stock; install automatic grinding machinery, patents held by James Runyen, Redkey, Ind.; manufacture lighting glassware; daily capacity 25,000 pounds; Mervin McKaig, general manager.

Md., Hyattsville — Drugs. — Consolidated Drug Co., capital stock \$150,000, incorporated by Archibald Vinberg of Hyattsville, George E. Stadler and M. T. Pines of Washington, D. C.

Mo., Kansas City. — Weant-Wetzel Manufacturing Co., capital stock \$50,000, incorporated by Harrison Weant, A. M. Wetzel and H. C. Adkins.

Mo., Marshall — Serum. — Central Missouri Serum Co., capital stock \$800, incorporated by James B. Rand, W. B. Welch and F. C. Streeter.

Mo., St. Louis — Medicines, etc. — Dovey Pharmaceutical Co., capital stock \$10,000, incorporated by John S. C. Dovey, William G. Miller, George E. Hoffman, Dr. A. E. Fick and others.

Mo., St. Louis — Nicotine. — Nicotine Manufacturing Co., 7 Lucas Ave., capital stock \$500, incorporated; Jno. S. Carter, president and treasurer; J. L. Carter, secretary; J. B. Moberly, manager; manufacture refined nicotine.

Mo., St. Louis — Tobacco. — Nunn-Buse Leaf Tobacco Co. incorporated by A. R. Nunn, F. H. Buse, A. C. Lauter, W. A. Krefl and J. L. Zulaut; capital stock \$100,000.

N. C., Wilmington — Bakery. — Royal Baking Co., James F. Russ and Joseph B. Fox, proprietors, 22 N. Front St., succeeds Warner's Steam Bakery; will make improvements and additions.

Okla., Bromide — Lime. — Bromide White Lime Co., capital stock \$15,000, incorporated by J. A. Summer of Bromide, L. L. Emry and I. M. Emry of Oklahoma City, Okla.

S. C., Anderson — Garters. — La Salle Garter & Supporter Co., capital stock \$500, incorporated by U. G. Salla, Sam Boleman and Mrs. Carrie S. Salla.

Tenn., Chattanooga — Lime and Cement. — Howard Lime & Cement Co., capital stock \$15,000, incorporated by W. A. Sadd, C. A. Lyerly, Porter Warner and others.

Tenn., Concord — Lime. — Concord Lime Works, B. S. Jones, owner, will rebuild plant reported burned; erect 40x90-foot and 50x100-foot buildings of tin construction; cost \$1500; daily capacity of plant, 300 barrels lime.

Tenn., Memphis. — Stuart American Products Co., capital stock \$200,000, incorporated by Henry C. Loeb, N. N. Thompson, Roy Stuart and others.

Tenn., Memphis — Bottling. — Sip Bottling Corporation, capital stock \$50,000, chartered by J. S. Wahl, J. Wise Brown, L. D. Bejach and others.

Tenn., Paris — Bottling. — Lasater Bros. Bottling Plant (recently noted to be installed) will have daily capacity about 200 cases soda water; will erect 1500 30x60-foot building and install equipment.

Tex., Dallas — Drugs and Chemicals. — Rogers Drug & Chemical Co., 502 N. Akard St. (recently noted incorporated with \$10,000 capital stock), will manufacture drugs, chemicals, etc.; has building; Russell Rogers, president; J. Fred Rogers, vice-presi-

dent and treasurer; E. H. Sullivan, secretary. (See "Machinery Wanted.")

Tex., Fort Worth — Specialties. — Southern Manufacturing Co., 214 W. 4th St., states will install punch, presses, shearing machines, etc., for manufacture of specialties, etc.; John R. Griffin, president; Walter F. Casey, vice-president; W. E. Russell, secretary, treasurer and manager. (Recently noted incorporated, capital stock \$5000.)

Tex., Houston. — Dew Bros. Company (recently noted to enlarge plant) will erect cotton-ginning building at Dewalt. (See "Cotton Compresses and Gins.")

Tex., Houston — Bakery. — William L. Richter will build addition to bakery; install bread-making machinery to increase daily output to 25,000 or 30,000 loaves; total cost about \$10,000.

Tex., Houston Heights — Vinegar, etc. — Price-Booker Manufacturing Co. will erect building; four stories; brick; 100x160 feet; cost \$60,000; will install vinegar plant.

Tex., Yoakum — Mattresses. — N. Elliott of Lagrange, Tex., will establish mattress factory.

Tex., Lockhart — Marble. — Board of Trade has arranged for establishment of marble works.

Va., Norfolk — Stock Remedy. — Anti-Choleric Stock Remedy Corporation chartered; C. D. Gilliam, president; W. W. Elliott, secretary.

Va., Norfolk — Unloading Device. — S. W. Lyons, Jr., contemplates organizing company to manufacture device for unloading log cars.

Va., Staunton. — Nail Manufacturing Co. increased capital stock from \$15,000 to \$20,000.

W. Va., Clarksburg — Headlight Reflectors. — National Reflector Co. will add some machinery in connection with building recently mentioned; new equipment to include fan, positive pressure blower, shafting, scales, hangers, etc.; has completed new building. (See "Machinery Wanted.")

W. Va., Dunbar — Lamp Chimneys, etc. — Dunbar Flint Glass Co. will erect at Dunbar the factory building recently noted under Charleston (four miles distant); main building 80x60 feet; frame and corrugated iron; building proposals opened August 12; plans by James L. Montgomery, Charleston, W. Va.; no machinery bids; manufacture lamp chimneys, lantern globes and gas globes; about five cars weekly.

MOTORS AND GARAGES

Fla., Haines City. — F. A. Randall will erect garage and apartment-house; 36x60 feet; cement block; fire-places; lighting not determined; platform elevator; rubberoid roofing; cost \$3000; plans and construction by owner; recently noted under "Stores." (See "Machinery Wanted.")

Fla., Jacksonville. — Smith, Richardson & Conroy awarded contract to Buckland & Fitchner, Jacksonville, to erect recently noted garage; cost \$5000; one story; ordinary construction; 65x100 feet; plans by H. J. Klutho, 402 St. James Bldg., Jacksonville.

Fla., St. Petersburg — Garage. — Alexander Linn will erect garage.

Ky., Louisville — Automobile Repairs, etc. — Monarch Auto Co., 206 E. Broadway, C. H. Pierson, president, opened proposals August 1 for erection of 50x200-foot two-story fire-proof building; conduct general auto repairs. (Recently noted incorporated, capital stock \$10,000.)

Ky., Louisville. — Reid Auto Co., capital stock \$5000, incorporated by A. E. Reid, Alta Reid and W. G. Clapp.

Md., Baltimore — Garage. — John F. Reus, Jr., 1900 W. Baltimore St., purchased building on Mt. Royal Ave. near Oliver St. and will remodel as garage; frontage 90 feet.

Mo., Farmington — Automobiles. — St. Francis Motor Co., capital stock \$4000, incorporated by Martin L. Clardy, Jr., R. P. Lang and Carlisle E. Rozier.

Mo., St. Louis — Automobiles. — Palmer-Meyer Motor Car Co. incorporated by Chas. W. Palmer, Frederick C. Meyer and Ferdinand A. Meier; capital stock, \$100,000.

N. C., Aberdeen — Automobiles. — Auto Motor Car Co., capital stock \$10,000, incorporated by Henry A. Page, Sr., Henry A. Page, Jr., R. J. Cochran, W. A. Blue and others.

N. C., Lenoir — Garage. — O. P. Lutz and E. F. Allen will build garage; 51x75 feet; brick.

N. C., Newbern — Garage. — Ward Company awarded contract to Blalock Bros., Newbern, to erect recently-noted garage; cost about \$6500; brick; 59x125 feet.

N. C., Selma — Automobiles and Garage, etc.

Selma Motor Car Co. will open proposals about September 1 for erection of two-story 44x58-foot ordinary brick construction building; plans by Chas. Benton, Wilson, N. C.; will conduct automobile sales agency and garage; also handle mill supplies, farm machinery, etc.; W. G. Ward, president; N. E. Ward, vice-president; J. J. Dillard, secretary-treasurer. (Recently noted incorporated, capital stock \$25,000.)

Okl., Pauls Valley—Garage.—Tom Grant, Sr., will build garage 50x80 feet; J. H. Leedy, architect, Pauls Valley; bids received.

S. C., Greenwood—Garage.—Kellar Bros. will build garage; awarded contract.

Tex., Fort Worth—Automobiles.—A. J. Sandegard awarded contract to E. F. Moore, Fort Worth, to erect three-story \$40,000 building, to have automobile salesrooms on first floor, bachelor apartments above. (See "Apartment-houses.")

Tex., Bonham—Garage.—J. J. Catron will erect brick building for garage.

Tex., Houston—Garage.—Green Taxi & Auto Co., W. W. Kyle, president, will, it is reported, build garage and apartment-house. (See "Apartment-houses.")

Tex., Yorkum—Automobiles.—Universal Motor Car & Supply Co. organized by Otto Wagoner, T. L. Burns, H. Seachamp, Ross W. Irvin and F. F. Klohs; purchased and will continue Texas Motor Car & Supply Co.

RAILWAY SHOPS, TERMINALS, ROUNDHOUSES, ETC.

S. C., Spartanburg.—South Carolina Power, Light & Railway Co. will erect machine shop, carpenter shop and paint shop and enlarge car barn.

Tenn., Nashville.—Nashville, Chattanooga & St. Louis Railway, H. McDonald, chief engineer, Nashville, will, it is reported, build shops at Flat Rock.

Tex., Mexia.—Houston & Texas Central Railroad Co., I. A. Cunningham, assistant general manager, Houston, Tex., advises will build, by company force, a six stall round-house and miscellaneous shop buildings; fire-proof; cost \$40,000. (Recently noted to erect shops, etc., near Mexia.)

Tex., Silsbee.—Gulf, Colorado & Santa Fe Railway, F. Merritt, chief engineer, Galveston, Tex., awarded contract to H. D. McCoy of Cleburne, Tex., at \$35,000 to erect engine-house; eight stalls; brick and concrete.

ROAD AND STREET WORK

Ala., Hamilton.—Marion county votes November 1 on \$100,000 bond issue for road construction. Address County Commissioners.

Ala., Stevenson.—Jackson county asks bids until September 16 for grading, arainling and macadamizing part of Crow Creek road; expenditure \$8000; W. S. Keller, State Highway Engineer. (See "Machinery Wanted.")

Ark., Dermott.—City will place five miles concrete sidewalks and grade, drain and oil two blocks on Arkansas St. and three on Front St.; engaged E. A. Kingsley, State Highway Engineer, Little Rock, Ark., to establish grade line.

Ark., Pine Bluff.—Commissioners Road District No. 5 of Jefferson County (M. W. Ware, C. P. Clemmons and others) have \$120,000 bond issue available to construct road from Pine Bluff to Noble Lake. (Previously mentioned.)

Fla., Jacksonville.—Duval County Commissioners awarded contract to G. D. Bryan & Co. of Jacksonville to pave Fernandina road with shell.

Fla., Lake City.—Board of Bond Trustees ask bids, opened September 8, on about 3500 square yards cement sidewalks. (See "Machinery Wanted.")

Ga., Valdosta.—City votes September 15 on \$35,000 bond issue to pave streets. Address The Mayor. (Recently mentioned.)

Ky., Greenville.—City will construct about two miles macadam streets; contract to be let; Orin L. Roark, City Clerk.

Md., Baltimore.—City will pave with bituminous concrete Ellamont, Rosedale, Smallwood, Presbury and other streets included in contract No. 128; 22,800 square yards; bids received until August 27; John L. Sanford, acting president Commissioners for Opening Streets. (See "Machinery Wanted.")

Md., Baltimore.—Board of Awards rejected bids for paving portions of Exeter and President Sts., Eastern Ave. and East Falls Ave. and two driveways into sewerage pumping station, contract No. 61; propose to revise specifications and substitute sheet asphalt on some streets; awarded contracts to Southern Paving & Construction Co. of Chattanooga, Tenn., contract No. 65, portions of Fayette, Pratt and High Sts.; sheet

asphalt, 15,100 square yards, and granite block, 3750 square yards; also contract No. 67, portions of Homewood Ave., McKim St., Ashland Ave., Caroline, Federal and Saratoga Sts., and Maryland Ave.; sheet asphalt, 19,800 square yards; bituminous concrete, 3400 square yards; granite block, 2650 square yards, and vitrified block, 5550 square yards; contract price, \$46,257.10 and \$82,572.40, respectively. (Call for bids lately noted.)

Md., Princess Anne.—Somerset county will construct two miles of State-aid road along Princess Anne-Deals Island Rd. between corporation limits of Princess Anne and Deals Island; bids received until September 2. (See "Machinery Wanted.")

Md., Centerville.—Queen Anne's county, E. John Merrick, clerk, will construct 1.7 miles of road between Queenstown and Winchester; .7 mile between Queenstown and Centerville and 1 mile between Centerville and Ruthsburg; bids received until September 2; F. E. Schneppe, Roads Engineer. (See "Machinery Wanted.")

Miss., Carthage.—Leake county voted August 19 on \$30,000 bonds to construct roads leading into Carthage. Address County Supervisors.

Miss., Greenville.—Board of Mississippi Levee Commissioners will construct 17,500 square feet four-inch plain concrete pavement, 370 linear feet eight-inch curb wall three feet deep and 190 linear feet eight-inch curb wall five feet deep in each of three-spur levee protection caps; bids received until September 8; W. L. Thompson, chief engineer. (See "Machinery Wanted.")

Miss., Holly Springs.—Marshall County Supervisors will lay 2300 feet concrete paving around courthouse; plans and specifications on file; opens bids September 2; C. H. Wright, Clerk. (See "Machinery Wanted.")

N. C., Charlotte.—City will pave portions of E. 7th St., Tenth Ave. and Lamar Ave.; Joseph Firth, City Engineer.

N. C., Columbus.—Polk County Commissioners awarded contracts for road construction; \$100,000 bond issue voted. (Previously mentioned.)

N. C., Newton.—City awarded contract to H. H. Abbe of Hickory, N. C., to pave streets. (Recently mentioned.)

N. C., New London.—Harris township of Stanley county contemplates, it is reported, issuing bonds for road construction. Address Township Commissioners.

N. C., Salisbury.—Rowan county will build with own force recently-noted Whitney Rd. to Stanton county line; about 15 miles; C. M. Miller, engineer, Salisbury.

N. C., Snow Hill.—Greene county voted \$20,000 bond issue for road improvements. Address County Commissioners. (Recently mentioned.)

Okl., Sand Springs.—City will grade and pave streets. Address The Mayor.

S. C., Anderson.—City contemplates vote on \$75,000 bond issue for street paving; W. H. Shearer, City Engineer.

Tenn., Memphis.—City awarded following contracts for street paving: J. E. Pollard Construction Co. at \$4887 and \$1185.60, respectively, Regent Pl. from Race to Orleans St. and Race St. from McLemore Ave. to Regent Pl.; R. D. Barclay at \$254.73, Cambridge Ave. from Wellington St. to Parkway, and G. O. White at \$5614, Vine St. from Olive Ave. to Parkway.

Tenn., Nashville.—City Council authorized issuance of \$33,000 bonds for street paving; will pave portion of Park Ave. with macadam, with asphalt binder; W. W. Southgate, City Engineer.

Tex., Bartlett.—Bartlett district of Williamson county voted \$15,000 bond issue for road construction. Address District Commissioners.

Tex., Bonham.—City will construct concrete sidewalks costing \$8000; contract awarded. Address The Mayor.

Tex., Denison.—City awarded contract to Murphy-Moulton Company, Denison, to construct recently-noted paving on Gandy St.; excavating of 7600 cubic yards at \$0.50; finished pavement, 30,700 square yards at \$1.35; combined curb and gutter, 622 linear feet at \$0.50; plain curb at \$0.35; gutter, 18 inches wide, 644 linear feet at \$0.35; 12x12-inch oak header, 1070 linear feet at \$0.25; J. C. Field, City Engineer.

Tex., Fort Worth.—City is considering repaving Main St. from depot to courthouse. Address The Mayor.

Tex., Gause.—Gause district of Milam county awarded contract to W. T. Montgomery of San Antonio, Tex., to construct roads; \$50,000 bond issue available.

Tex., Groveton.—Precinct No. 2 of Trinity county petitioned County Commissioners to

order election to vote on \$100,000 bond issue for road construction.

Tex., Kountze.—Saratoga and Batson districts of Hardin county defeated \$65,000 bond issue to shell road from Batson to Saratoga. Address County Commissioners. (Recently mentioned.)

Tex., Laredo.—Webb County Court will construct 34.8 miles of road known as Laredo-San Antonio Highway, culverts and bridges thereon, surface with gravel about seven miles road, etc.; bids received until August 27; plans and specifications at office of E. J. Foster, County Surveyor; J. A. Rodriguez, County Clerk. (See "Machinery Wanted.")

Tex., Paducah.—Commissioners' Precinct No. 1 of Cottle County defeated \$50,000 bond issue for road construction. Address County Commissioners. (Previously mentioned.)

Tex., Pearland.—Road District No. 3 will construct shell roads; bids received until August 26; A. W. York, secretary Road Commissioners. (See "Machinery Wanted.")

Tex., Waco.—City will construct 15,000 square yards of paving, 6000 linear feet two-foot gutter, 1500 linear feet new curb; about 1500 cubic yards of excavation; material, vitrified brick laid flat, bitulithic, bituminous concrete or asphalt macadam; bids received until August 22; John W. Foster, Commissioner of Streets, Sewers and Public Improvements; G. E. Byers, City Engineer. (See "Machinery Wanted.")

Va., Danville.—City will expend about \$30,000 to improve streets in various wards; J. O. Magruder, City Engineer.

Va., Lynchburg.—City awarded contract to Jones & Adams of Lynchburg to improve Norfolk Ave.; about 6500 cubic yards excavation, 1100 cubic yards trench excavation, 3100 square yards macadam pavement, 3100 square yards tarvia "B" surface treatment, 3000 linear feet concrete curb, 600 linear feet Wainwright corner bar, 500 square yards concrete gutters, 1500 square yards granolithic sidewalks, 4 trapped inlets and 100 linear feet sewer pipe; H. L. Shaner, City Engineer. (Call for bids lately noted.)

Va., Norfolk.—Street Committee recommended to Common Council paving of Washington St. from South to Harrison St., to cost not more than \$22,000; petitioned for authority to invite bids for paving Lincoln St. from 6th to Washington St. with smooth-surface paving; cost estimated at \$3000.

Va., Richmond.—City will pave 25th St. from Broad to Grace St. with smooth paving; Charles E. Bolling, City Engineer.

W. Va., Buckhannon.—City will pave 16,000 yards of streets and lay about 10,000 linear feet cement curbing; bids closed August 19; Charles J. Poe, Mayor.

W. Va., Wheeling.—Ohio County Commissioners will pave portions of certain roads with brick; open bids August 28; also macadamize certain roads; open bids August 29; also place bituminous macadam on Long Run Rd., about two miles; open bids August 28; George W. Oldham, Clerk. (See "Machinery Wanted.")

SEWER CONSTRUCTION

Ala., Clanton.—Town will vote on bond issue to construct sewer system. Address Town Clerk.

Ala., Scottsboro.—City awarded contract to construct proposed sewer system. Address The Mayor. (See "Water-works.")

Ga., Cornelia.—City voted \$12,000 bond issue for sewer and water extension; contractor, North Georgia Engineering & Contracting Co., Clayton, Ga.; W. B. Ellard, Mayor.

Ky., Louisville.—Board of Public Works awarded contract to J. H. Cabill at \$21,536.54 to construct Schwartz Ave. sewer; rejected bids to construct Payne St. and Rastetter Ave.; will advertise for new bids for latter. (Call for bids lately noted.)

La., New Iberia.—Xavier A. Kramer, Magnolia, Miss., engineer, states plans will be ready about October 1 for sewer system and disposal plant recently noted; cost about \$100,000.

Md., Baltimore.—City will construct storm-water drains, contract No. 30, and lateral sewers and house connections in Districts Nos. 21-A and 22-A, sanitary contract No. 118; former will require 5715 linear feet masonry drain, 1150 linear feet terra-cotta pipe drains and sewers and 14 manholes; latter, 13,500 linear feet vitrified-pipe house connections and 13,000 linear feet vitrified-pipe sewer 8 to 15 inches in diameter; Charles England, chairman Sewerage Commission, American Bldg. (See "Machinery Wanted.")

Md., Kensington.—City engaged Harry Stevens, Union Trust Bldg., Washington,

D. C., to prepare plans for complete sewerage and water systems and sewage-disposal plant.

Miss., McComb.—Xavier A. Kramer, Magnolia, Miss., engineer, states plans will be ready about October 1 for recently-noted sewer system; cost about \$100,000.

Mo., Carthage.—City Council passed ordinance ordering construction of main sewer through west and southwest portions of city; 14,000 feet long; 15-inch tiling; estimated cost, \$24,107.75; Frank Newton, City Engineer. (Recently mentioned.)

Mo., Dexter.—City voted \$53,000 bonds to construct sewer system and water-works; engaged Frank L. Wilcox, Chemical Bldg., St. Louis, Mo., to prepare plans and specifications.

Mo., St. Louis.—City will construct relief sewer through Mill Creek Valley from Vandeventer Ave. to empty into river at foot of Convent St.; length about five miles; Chas. A. Moreno, Sewer Commissioner.

N. C., Bloomsbury, not a postoffice.—James H. Pon, 210 Tucker Bldg., Raleigh, N. C., asks bids until September 15 for construction of about 10,000 feet sewer; engineers, Riddick & Mann, Raleigh. (See "Land Development" and "Machinery Wanted.")

N. C., Charlotte.—City will construct about \$400 feet 8-inch sewer; bids received until August 27 by Executive Board, A. H. Wear, City Clerk and Treasurer; Joseph Firth, City Engineer. (See "Machinery Wanted.")

N. C., Charlotte.—City awarded contract to Sullivan, Long & Haggerty Co. of Bessemer, Ala., at \$45,000 to lay 12½ miles sewer pipe; Joseph Firth, City Engineer. (Call for bids lately noted.)

N. C., Hamlet.—City awarded contract to L. P. Duke of Johnson City, Tenn., at \$602.25 to construct sanitary sewer system; six miles pipe; also let contract for pipe; engineers, Lyon & Lipscomb, Gaffney, S. C. (Call for bids lately noted.)

Tex., Austin.—City awarded contract to Shone Company of Chicago, Ill., at \$2900 to install lift station for West Austin sewer lines; equipment will consist of air compressor, air receiver and two pumps.

Tex., Bay City.—City Council ordered A. R. Lerkle, City Engineer, to survey city with view to constructing sewer system.

Tex., Rosenberg.—City retained Randall Lovegrove-Wyman, Union National Bank Bldg., Houston, Tex., to prepare plans and specifications for sewer and water systems.

Va., Appalachia.—City, E. A. Collins, recorder, awarded contract to American Light & Water Co., Chicago, Ill., to construct previously-noted house sewerage system; estimated cost \$20,000.

Va., Manassas.—City voted \$75,000 bonds for construction of sanitary sewerage system, sewage-disposal plant, water-works and municipal electric-lighting plant; engineer, Harry Stevens, Union Trust Bldg., Washington, D. C.

W. Va., Bluefield.—City awarded contract to Sluss-Baker Constructing Co. of Graham, Va., to construct Bluefield-Graham sewer, about 8500 feet long; 15 and 18-inch pipe; cost \$13,000 (at present); later, \$25,000. (Recently mentioned.)

TELEPHONE SYSTEMS

Ark., Berryville.—Berryville Telephone Co., capital stock \$10,000, incorporated by W. G. Hanbury, R. E. Norris, Tom Morris and others.

Fla., Auburndale.—Lake Region Telephone Co., Winter Haven, Fla., C. M. H. Eycleshimer, engineer in charge, will construct recently-noted telephone system; 50 metallic selective ringing system up to five-mile line; capital stock \$30,000. (See "Machinery, etc., Wanted.")

La., Collinston.—Telephone company organized with F. McCormick, president, and W. A. Page, treasurer; plans to connect farms with Collinston.

N. C., Paw Creek.—Paw Creek Telephone Co., capital stock \$2000, incorporated by Plummer Stewart of Charlotte, N. C., and others.

Tex., Houston.—Suburban Gardens Telephone Co. increased capital stock from \$10,000 to \$35,000.

Tex., San Antonio.—J. D. Horn will construct telephone system along Horn, Fest and Basse Rds.

TEXTILE MILLS

N. C., China Grove.—Cotton Cloth.—Patterson Manufacturing Co. will not rebuild portion of mill or construct addition to dam; recent report was error.

N. C., Gibsonville.—Hosley.—Gibsonville Hosley Mills, capital stock \$100,000, incorporated by J. L. Kernodle, G. W. Fogleman, W. C. Michael and others.

S. C., Anderson.—Silk.—S. Saricannan, Augusta, Ga., will establish silk mill; import raw silk while planning to cultivate silk-worm.

S. C., Columbia.—Absorbent Cotton.—Southern Aseptic Cotton Co. will probably rebuild its mill reported burned at loss of \$50,000.

S. C., Rock Hill.—Cotton Yarn.—Wymojo Yarn Mills will add 2160 spindles, not 2000, as lately stated; awarded contract.

Va., Culpeper.—Silk.—Culpeper Silk Mills (recently reported incorporated with \$50,000 capital stock) reported as under management of Rigny Silk Co. of Paterson, N. J.

WATER-WORKS

Ala., Clanton.—Town will vote bond issue to construct water-works. Address Town Clerk.

Ala., Girard.—Columbus Water Supply Co., John B. Weakley, president, Columbus, Ga., has water franchise; involves only extension of company's mains into Girard; has contracted for pipe, and at this time will make no other purchases. (This supersedes recent report.)

Ala., Scottsboro.—City purchased 40 acres land on mountain for construction of water-works system; engineer, J. B. McCrary Company, 1408 Third National Bank Bldg., Atlanta, Ga.; asks bids until August 28 on materials, including cast-iron pipe, galvanized pipe, hydrants, steel bars, lead, Portland cement, etc. Address W. C. Maples, City Clerk. (See "Machinery Wanted.")

Ark., Brinkley.—Brinkley Water & Light Co., J. W. Neff, superintendent, will lay about 12,000 feet of mains in connection with sewer system now being extended; will install 20 additional fire hydrants; also adding to electrical department; part of this work under construction.

Fla., Lake Worth.—City will grant franchise to Percy Hagerman (of Colorado) to build water, light and ice plants.

Fla., St. Petersburg.—City will build 80,000-gallon water tank, install 150-horse-power boiler and lay larger mains; bids for materials invited until September 2; W. C. Maples, City Clerk; M. W. Spencer, City Engineer. (See "Machinery Wanted.")

Ga., Cordele.—City will improve water-works, expending bond issue of \$40,000; erect brick fireproof building costing \$3500 and installing machinery costing \$22,000; additional machinery will increase water supply obtained from wells to 1500 gallons per minute from 400 gallons; construct reservoir with capacity 250,000 gallons and build elevated tank of 750,000 gallons capacity; Arthur Pew, consulting engineer, 619 Temple Court Bldg., Atlanta, Ga., is preparing plans. (Previously mentioned.)

Ga., Cornelia.—City voted \$12,000 for water and sewer extension; contractor, North Georgia Engineering & Contracting Co., Clayton, Ga.; W. B. Ellard, Mayor.

Ga., Milledgeville.—City is considering construction of water-works; Miller S. Bell, Mayor.

Ga., Valdosta.—City votes September 15 on \$15,000 bond issue to extend water mains. Address The Mayor.

Ky., Anchorage.—Louisville Water Co. agreed to furnish water service if municipality will lay mains and build pipe line to connect with company's main near Lakeland; town will vote August 30 on \$25,000 bond issue to determine action. Address The Mayor.

Ky., Louisville.—Louisville Water Co., Theodore A. Leisen, chief engineer, will install 12 additional filter beds to double capacity of Crescent Hill filtration plant; cost about \$200,000.

Md., Kensington.—City engaged Harry Stevens, Union Trust Bldg., Washington, D. C., to prepare plans for water system. (See "Sewer Construction.")

Mo., Dexter.—City voted \$53,000 bonds to construct water and sewer systems; engaged Frank L. Wilcox, Chemical Bldg., St. Louis, Mo., to prepare plans and specifications.

N. C., Bloomsbury (not a postoffice).—Jas. H. Pou, 219 Tucker Bldg., Raleigh, N. C., asking bids until September 15 for construction of about 15,000 feet water pipe and 10,000 feet of sewer; engineers, Riddick & Mann, Raleigh. (See "Land Development" and "Machinery Wanted.")

N. C., Manteo.—City will construct artesian well; bids received until September 1; W. J. Griffin, Mayor pro tem. (See "Machinery Wanted.")

Okla., Forgan.—City will construct water-works; cost \$25,000; engineers, W. C. Swanwick & Co., Joplin, Mo.; H. P. Garrett, City Clerk.

Okla., Medford.—City will rebuild water, light and power plants burned at estimated loss of \$12,000. Address The Mayor.

S. C., McColl.—Board of Public Works awarded contracts to construct water-works and furnish machinery; Dysard Contracting Co., 400 Austell Bldg., Atlanta, Ga., secured general contract at \$12,250, and Chicago Bridge & Iron Co. of Chicago, Ill., at \$4400 for tower and tank; J. Newton Johnson, engineer; Dysard company advises that plant will cost \$30,000; capacity, 720,000 gallons daily; brick buildings of 36x51 feet, to cost \$25,000; 4, 6 and 8-inch cast-iron pipe for water main. (Call for bids recently noted.)

S. C., Ridgeland.—Town votes in October on \$8000 bond issue for water-works. Address Town Clerk. (Recently mentioned.)

Tex., Bella.—Bells Gin Co. will construct water-works.

Tex., Clarendon.—City purchased water-works system and will make extension; daily capacity, 100,000 gallons; construct reservoir of 50,000 gallons capacity; bids opened August 25; purchased machinery at cost of \$12,500; James Trent of Clarendon, engineer in charge; E. H. Powell, City Secretary; recently noted as to issue \$16,000 of water-works bonds. (See "Machinery Wanted.")

Tex., Hamiltonburg.—Town voted \$9000 bonds to construct water-works. Address Town Clerk. (Recently mentioned.)

Tex., Park Place, P. O. at Houston.—Park Place Water, Light & Power Co., capital stock \$10,500, incorporated by G. J. McCarty, F. A. Tucker and Lewis Fogle.

Tex., Rosenberg.—City voted \$6000 bonds to construct water-works; retained Randall-Lovegrove-Wyman, Union National Bank Bldg., Houston, Tex., to prepare plans and specifications for water and sewer systems. (Recently mentioned.)

Tex., West.—City votes September 30 on \$21,000 bonds for water-works. Address The Mayor.

Va., Ashland.—D. B. Cox and associates purchased Ashland Water & Sewerage Co.'s water-works system; contemplate improvements and extensions. (City recently reported as considering purchase.)

Va., Manassas.—City voted \$75,000 bonds to construct water-works, electric-lighting plant and sewer system, etc.; engineer, Harry Stevens, Union Trust Bldg., Washington, D. C. (See "Sewer Construction.")

W. Va., Huntington.—City contemplates voting on \$800,000 bond issue to construct water-works; A. B. Maplin, City Engineer.

WOODWORKING PLANTS

Ark., Brownsville.—Staves.—Welsh Stave Co., Welch, La., purchased 2600 acres timber land and will manufacture staves.

Ky., Louisville.—Cooperage.—J. Schwarzwalder & Sons Co., previously reported to build plant, will install generator, motors and other electrical equipment and barrel-making machinery.

Ky., Louisville.—Church Furniture.—Lausberg & Macke will rebuild church-furniture factory recently burned; 200x38 feet and 90x57 feet; mill construction; cost \$3000; bids opened August 14; cost of machinery (purchased), \$3500.

La., Hammond.—Boxes.—Hammond Box & Veneer Co. will enlarge plant for manufacturing strawberry boxes.

Mo., St. Louis.—Buggies.—Banner Buggy Co. will build addition to buggy factory.

N. C., Wilmington.—Veneer, etc.—Atlantic Coast Veneer Co., Jas. A. Rowan, president, will build veneer plant; cost \$20,000; install veneer and basket machinery; manufacture furniture, veneer and fruit baskets; J. T. Davis is vice-president; W. P. Adams, treasurer; Martin Schauben, secretary.

Tenn., Nashville.—Furniture.—Fletcher Manufacturing Co., Eugene H. Fletcher, president, McMinnville, Tenn., will establish plant to manufacture porch and lawn furniture exclusively; electric power; erecting brick factory building and will build warehouses.

Tex., Bay City.—Boxes.—Tyler Box & Lumber Co., Tyler, Tex., purchased cottonwood timber and will manufacture egg case timber; contemplates building finishing plant to manufacture egg cases only.

Tex., Beaumont.—Boxes.—Sam J. Smith will establish \$25,000 box factory; purchased 2½-acre site.

BURNED

Ark., Cave Springs.—Perry Phillips' store; loss \$5000.

Ga., Columbus.—Colored Knights of Pythias lodge building; loss about \$3500.

Ga., Dalton.—Gus Yaeger's cotton gin; loss \$2500 to \$5000.

Ga., Savannah.—Merry, Ware & Co.'s planing mill on Gwinnet St. extension near Philpot Rd.; loss about \$10,000.

Ga., Savannah.—Phosphate Mining Co.'s plant damaged; loss \$20,000.

Ky., Elizabethtown.—G. R. Smith's store, loss \$4000; J. H. Creal's store, loss \$5000.

Ky., Louisville.—Lausberg & Macke's church-furniture factory at 970-980 Underhill St.; loss on building, \$5000, and on machinery, woods and finished stock, \$15,000.

Ky., Frankfort.—Building owned by James Sullivan and occupied by Walts-Smith-LeCompte Hardware Co. and others, loss \$20,000; Gem Moving-picture Theater, owned by Mrs. S. E. James, loss \$3500.

Ky., Pineville.—Wallins Creek Coal Co.'s coal tippie.

Ky., Stithton.—H. W. Rahm's residence; loss \$3000.

Ky., Upton.—G. R. Smith's store, loss \$4000; J. H. Creal's store, loss \$5000.

La., Baton Rouge.—Mrs. Florence Bozeman's dwelling; loss \$5000.

La., Folsom.—Folsom Lumber Co.'s dry-kilns; loss about \$5000.

La., Lucy.—Paul Berthelot's store; loss \$24,000.

La., Monroe.—Monroe Stationery Co.'s building; loss \$8500.

Md., Baltimore.—Stores of Isidore Goldman and Bernhard Seidman at Druid Hill Ave. and Baker St.; loss \$5000.

Md., Darlington.—David Price & Son's boiler plant (at cannery) damaged by explosion.

Miss., Greenwood.—Franklin Hotel, owned

by Ben Dameron of Jackson, Miss.; loss \$7500 to \$8000.

Miss., Jackson.—B. T. Raines' residence on Mansup St.; loss \$6000.

Miss., Lake.—G. B. Merrill & Bro.'s lumber plant; estimated loss \$60,000.

Mo., Joplin.—J. S. Mariatt's building at 520-22 Virginia Ave., occupied by J. S. Mariatt Transfer & Storage Co., Drawe Commission Co. and Joplin Cigar Co., less on building \$10,000; building at 524-26 Virginia Ave., occupied by Interstate Mercantile Co. and others and owned by W. H. Smith Joplin, and Levering estate, Hannibal Mo.; loss \$5000.

Mo., Kansas City.—Stable of Wells-Fargo & Co. Express, main office, 51 Broadway, New York; loss \$5000.

Mo., Liberty.—Wornall Hall, at William Jewell College; loss \$100,000.

Mo., Sedalia.—J. W. Menefee's stable, loss \$10,000; Missouri, Kansas & Texas Railway's passenger depot, loss about \$5000; S. B. Fisher, chief engineer, St. Louis, Mo.

N. C., Raleigh.—Building owned by Raleigh Lodge No. 735, Benevolent Protective Order of Elks; loss \$7000 to \$10,000.

Okla., Medford.—Municipal water, electric-light and power plants; loss \$12,000. Address The Mayor.

S. C., Columbia.—Southern Aseptic Cotton Co.'s mill; loss \$50,000.

S. C., Coward.—O. O. Graham's cotton gin.

S. C., Ferguson.—Hotel owned by Santee River Cypress Lumber Co.; loss \$30,000.

Tenn., Columbia.—Dr. T. J. Hardison's barn on Carters Creek.

Tenn., Concord.—Concord Lime Works, Ben Jones, owner; loss \$3000 to \$5000.

Tenn., Knoxville.—James Haddox's two barns and four silos; loss \$7000.

Tex., Mission.—Southland Lumber Co.'s plant; Hidalgo Mercantile Co.'s building; estimated loss to each, \$15,000 to \$20,000.

W. Va., Williamson.—Hearst Hardware Co.'s building; loss \$30,000.

BUILDING NEWS BUILDINGS PROPOSED

APARTMENT-HOUSES

Fla., Haines City.—F. A. Randall will expend \$3000 to erect apartment-house and garage recently noted. (See "Motors and Garages.")

La., New Orleans.—Estate of A. Monteleone, J. D. Kenny, representative, is reported to have abandoned plan to erect apartment on St. Charles Ave. (Previously noted.)

Mo., St. Louis.—George Feith will erect two-story apartment-house at 3524 Iowa St.; cost \$1000.

Mo., St. Louis.—A. M. Corawell will erect apartment-house; 52x52 feet; fireproof construction; heating from down-draft steam boiler; composition roofing; cost \$35,000; plans and construction by owner.

Mo., St. Louis.—M. Curry Giles of Bottorff Realty Co. and Fred Schroer are having plans prepared for seven-family apartment-house on Westgate Ave.; five rooms and sun parlor to each apartment.

Mo., St. Louis.—Mrs. Esther Sparbur will erect apartment-house and store on Easton Ave.

Mo., St. Louis.—Victor Moore will erect apartment-house on Blaine St.; four and five rooms each.

Mo., St. Louis.—Carl Fischer will erect apartment-house at 3553 Louisiana St.; two stories; cost \$3500.

Mo., St. Louis.—Louis Schick will erect apartment-house at 2829 Olive St.; two stories; cost \$3000.

Mo., St. Louis.—J. V. Wettle will erect apartment-house at 4034-06 Grove St.; two stories; cost \$5500.

Mo., St. Louis.—Julia Praechter will erect apartment-house at 2201-03 Jules St. and 2210 Ann St.; two stories; cost \$10,000.

Mo., St. Louis.—Anna Wagner will erect apartment-house at 3552 De Tonty St.; two stories; cost \$5200.

Mo., St. Louis.—Louis Nieman will erect two-story apartment-house at 1417 N. 14th St.; cost \$5500.

Mo., St. Louis.—A. Eblinger will erect two-story tenement-house at 735-37 S. Newstead St.; cost \$4500.

Mo., St. Louis.—Charles C. Schaefer will erect apartment-house on Minnesota Ave.

N. C., Raleigh.—R. L. Horton will erect two 12-room apartment-houses on N. Bloodworth St. in addition to similar structures under construction.

Tenn., Chattanooga.—Tomlinson Fort will erect 15-room apartment-house on Fannin St. near 15th St. and two-story brick building on Fannin St. near 14th St.; total cost, \$5500.

Tex., El Paso.—William Rheinheimer will erect apartment-house at 416 S. Campbell St.; cost \$4500.

Tex., El Paso.—Mayfield Building & Improvement Co. (recently noted as having contract to erect apartment-house in Sunset Heights) states contract did not mature.

Tex., Houston.—W. T. Nobles will erect two-story brick apartment-house on Polk Ave.; cost \$6500.

Tex., Houston.—Green Taxi & Auto Co., W. W. Kyle, president, will occupy first floor and basement of three-story building to be erected on Main St.; second and third floors for Crow Apartments.

Tex., Houston.—Henry S. Fox, Jr., has plans by Green & Finger, Houston, for apartment-house at Travis St. and Dallas Ave.; 133x60 feet; exterior paving brick laid in Flemish bond with stone trimmings; 25 apartments of three and four rooms each; screened porches in front and rear; built-in cupboards and refrigerators; steam heat; individual storage-rooms, etc.; cost about \$50,000.

Tex., San Antonio.—O. O. Luter (owner), Room 9, French Bldg., will erect two-flat apartment; cost \$5000; mill construction; 10 rooms; electric lighting; concrete basement and walk; galvanized tin shingle roofing; construction by owner; plans by F. Behler; construction commenced; Mr. Luter states will soon build six additional buildings on adjoining lots. (Recently noted.)

ASSOCIATION AND FRATERNAL

Fla., Sanford.—Benevolent and Protective Order of Elks, No. 1241, receives bids until September 8 to erect building; 66x120 feet; ordinary construction; flat built-up roof; cost \$23,000; plans ready by August 22. (Recently noted.)

Ky., Princeton.—Princeton Lodge No. 1115, Benevolent Protective Order of Elks, will erect lodge building; three stories.

Miss., Hattiesburg.—Young Men's Christian Association will erect \$50,000 building.

Miss., Meridian.—Ancient Free and Accepted Scottish Rite Masons, O. L. McKay, chairman, open bids September 2 to erect cathedral; plans and specifications on application to P. J. Krouse, architect, Meridian, with deposit of \$25. (Lately noted.)

Mo., St. Joseph.—Young Women's Christian Association is having plans prepared by Walter Bosen, Tottle Bldg., St. Joseph, for \$100,000 building.

Tex., Galveston.—Scottish Rite Temple Association, Joseph Seinsheimer, president, purchased dwelling at 22d and Church Sts. and will enlarge for temple; construct two-story addition, etc.; cost about \$35,000.

BANK AND OFFICE

Ala., Birmingham.—Lee C. Bradley and associates, it is reported, are considering erection of office building on site of Lyon-Terry Bldg.

Ala., Castleberry.—People's Bank (branch of People's Bank of Evergreen, Ala.) will rebuild structure recently noted burned; erect \$5000 20x30-foot fireproof building with metal roof; architect not selected.

Ark., Grady.—Bank of Grady, J. H. Helms, president, will erect bank building.

D. C., Washington.—Vanderbilt University Trustees will remodel Vauxhall apartment-house and garage occupied by Chester Motor Car Co. into offices for Southern Bank & Trust Co. and store for Jungerman & Rust; plans call for erection of one-story front connecting apartment-house with garage, corner entrance to bank, etc.; cost several thousand dollars.

Fla., Orlando.—Dr. Cowell will erect residence and office building.

Ga., Macon.—Atlantic National Fire Insurance Co., John J. McKay, general manager, is having plans prepared for office building on Cotton Ave. near Poplar St.; two stories; 30x80 feet; brick; ornamental front studded with electric lights; fireproof vault; small auditorium on second floor; cost \$25,000; will remove present frame building to adjacent lot and remodel for store and office building.

Ky., Hazard.—R. D. Baker and W. M. Purdiss will let contract about September 1 to erect recently-noted three-story building; two stories on first floor; offices above; fireproof structure; 40x80 feet; cost \$12,000; hot-water heat; electric lighting; no elevator; probably install shaft; roofing not decided; glass and iron first floor front; pressed brick above; desire correspondence with contractors. (See "Machinery Wanted.")

Ky., Louisville.—Louisville Title Co. will remodel building at 221 S. 5th St.; cost \$10,000.

Miss., Greenwood.—G. A. Wilson will erect bank building at Howard and Market Sts.

Miss., Charleston.—Ben F. Saunders of Swan Lake, Miss., representing stockholders of bank being organized, including Major T. G. James of Sharkey, Miss.; W. R. Gay of Glendora, Miss., and others, purchased lot and will erect bank building.

Mo., Kansas City.—Holabird & Roche, Monroe Bldg., Chicago, Ill., contemplates constructing 16-story office building on 135x115-foot site; they wire Manufacturers Record: "Probably be considered in 6 or 8 months."

N. C., Charlotte.—Independence Trust Co., Julian H. Little, president, will let contract latter part of September to install bank fixtures to cost \$12,500.

N. C., Greenville.—Higgs, Hardee & Laughinghouse will receive bids until September 1 to erect four-story store and office building at Five Points; brick; electric elevators; steam heat; vacuum cleaning equipment; cost \$50,000; plans and specifications at office of John C. Stout, architect, Rocky Mount, N. C., or may be had on deposit of \$25. (Recently noted as Greenville, S. C.)

N. C., Henderson.—Law Building, Inc., chartered with \$25,000 capital stock by J. J. Harris, B. H. Perry, J. C. Kittrell and others; will erect office building; two stories; brick; 44x65 feet; ordinary construction; steam heat; metal or gravel roof; cost \$8000.

N. C., King.—King Branch of Bank of Stokes County, V. T. Grabbs, president, will erect bank building.

N. C., Tryon.—E. E. Missildine will rebuild office and store building recently reported burned. (See "Stores.")

Tex., El Paso.—Phoenix-El Paso Building Co. will erect office building in Bassett addition; brick; cost \$3000.

Tex., Point.—Guarantee State Bank will erect fireproof bank building.

Tex., San Antonio.—State Bank & Trust Co.'s remodeling plans include front of six stories; terra-cotta or artificial stone; vaults and safe-deposit boxes and bank fixtures; ornamental iron; two high-speed elevators; ornamental plaster interior; copper window frames and sashes; art glass; steam heat; electric wiring and fixtures; running ice water; mail chute; architect is Chas. T. Boelhaue, Owl Bldg., 223½ Losoya, San Antonio (not Chas. G. Boelhaue, as recently noted).

Tex., San Marcos.—J. M. Cape has plans for office and store building recently noted. (See "Stores.")

Va., Brookneal.—Bank of Brookneal, E. R. Monroe, president, contemplates erection of \$3000 bank building with vaults; directors' room and barber shop in rear.

CHURCHES

D. C., Washington.—Plymouth Congregational Church will repair structure at 17th and P Sts. N. W.; cost \$3400. Address The Pastor, Plymouth Congregational Church.

La., Shreveport.—Hebrew Zion Congregation has plans by E. F. Weld of Shreveport for synagogue; 70x100 feet; cost \$60,000.

N. C., Albemarle.—First Baptist Church, A. P. Harris, member of building committee, will erect \$25,000 building; brick; dome; hot-air or hot-water heat; electric lighting; ready to let contract.

N. C., Belhaven.—First Christian Church (recently noted to let building contract September 1) will erect 65x80-foot rough textile brick-vener structure; cost \$7000; Barrett specification roofing; hot-air heating; electric lighting; inside woodwork, No. 1 yellow pine; plans by A. A. Honeywell, Koloma, Ind.; W. J. Cocke, secretary building committee.

S. C., Edgefield.—Baptist Church, Dr. J. M. Jeffers, pastor, will open bids about October 1 to erect \$15,000 building, after plans by Sayre & Baldwin, Anderson, S. C.; structure about 50x80 feet; S. S. tin roof; indirect lighting; mechanical warm air heating. (Previously noted.)

Tex., Dallas.—Forest Avenue Baptist Church will erect structure at Peabody and Oakland Sts.; two stories and basement; brick veneer; cost \$12,000. Address The Pastor, Forest Avenue Baptist Church.

Tex., Dublin.—First Baptist Church has plans by Van Slyke & Woodruff, 515 W. 5th St., Fort Worth, Tex., for building; cost \$25,000.

Tex., San Antonio.—New Light Street Baptist Church will erect frame structure on Lavaca St.; cost \$3100. Address The Pastor, New Light Street Baptist Church.

Tex., Yoakum.—Methodist church will erect \$25,000 brick building; L. L. Stephenson, A. J. Ross, building committee.

Va., Portsmouth.—Trinity Episcopal Church will improve interior of building; install tile aisles and chancel, hardwood floors, electric wiring and fixtures, etc.; also contemplates installing new heating plant. Address The Pastor, Trinity Episcopal Church.

W. Va., Wheeling.—Greek Ruthenian congregation purchased site on South Side and will erect \$10,000 building; plans in progress. Address The Pastor, Greek Ruthenian Church.

W. Va., Weirton.—Presbyterian church will erect building. Address The Pastor, Presbyterian Church.

W. Va., Weirton.—Methodist congregation will erect building. Address The Pastor, Methodist Church.

CITY AND COUNTY

Ala., Birmingham.—Jail.—City jail repairs (recently noted) will cost about \$6000; plans in hands of H. B. Wheelock, architect, 18 Steiner Bldg., Birmingham; repairs to be supervised by Building Inspector A. W. Matthews.

Fla., Lake City.—City Hall.—City will vote August 26 on \$9800 bonds for city hall site and building. Address Mayor Julian. (Previously noted.)

Fla., Miami.—Fire Station.—City opened bids to erect North Side fire station; W. F. Yarborough is lowest bidder at \$4583; Mr. Yarborough's bid retained subject to change of plans. (Lately noted.)

Ga., Griffin.—Jail.—H. V. Kell, chairman Board of Commissioners of Roads and Revenues of Spalding County, will receive bids through W. E. H. Searcy, Jr., Clerk, until September 13 for material, alterations and additions to courthouse for jail purposes; 55 feet by 93 feet 2 inches; kitchen wing on right side; side porch on left side; bids received as follows: (a) For both building

and jail equipment, complete: (b) jail equipment, complete, including plumbing fixtures and toolproof bars to be placed in second-floor slab for portion of floor taken up by square area of cell work; (c) building only, including everything except jail equipment as set forth in (b); plans and specifications on file at office of board at Griffin, and Frederick Ausfeld, architect, Bell Bldg., Montgomery, Ala., or may be had on deposit at either office of \$25; or will be furnished to subcontractors on deposit of \$15. (Recently noted.)

La., De Ridder.—Jail, etc.—Beauregard Parish Police Jury will receive bids until September 9 to erect jail and courthouse; reinforced concrete; electric lighting; steam heat; steel cells; plans by Stevens & Nelson Co., Liverpool & London & Globe Annex, New Orleans, La. (Previously fully described.)

La., New Orleans.—Library.—Public Library Board, J. H. Dillard, president, will receive competitive plans for negro library.

Okl., Sand Springs.—Jail.—City will erect jail building. Address The Mayor.

S. C., Columbia.—Jail.—Richland County Commissioners, W. C. Thomas, clerk, will receive bids until August 26 to erect jail; fireproof; will include cellhouse, steel cells, hospital and barber shop; steam heat; electric lights; cost about \$50,000; plans and specifications at office of Hamby & Rorke, architects, Sylvan Bldg., Columbia.

Tenn., Dayton.—Auditorium.—Mayor John R. Crawford appointed A. P. Haggard (chairman), K. M. Benson, H. H. Frasa, R. W. Johnson and J. L. Godsey committee to devise ways and means of promoting erection of auditorium.

Tenn., Memphis.—Hospital.—City, R. A. Utley, acting Mayor, will erect hospital for babies on City Hospital grounds; plans by Jones & Furbinger, 110 Porter Bldg., Memphis; bids received until August 19; Ennis M. Douglass, City Clerk.

Tex., Dallas.—Jail, etc.—Dallas County Auditor will receive bids until September 13 (extended date) to erect nine-story-and-basement reinforced concrete fireproof criminal courts and jail building; separate bids received at same time for steel cell work, grating, etc.; plumbing, electric wiring, elevators, heating and washed-air ventilating system; latter two items to be submitted in one bid; bids for power plant and boilers will be asked for later; plans and specifications can be had at office of H. A. Overbeck, architect, 503 Juanita Bldg., Dallas, Tex., on and after August 6 upon receipt of check for \$50. (Recently noted.)

Tex., Hutchins.—Asylum.—Dallas County Commissioners contemplate erecting brick building for insane near Hutchins. Address County Commissioners, Dallas, Tex.

Tex., Longview.—Hospital.—Gregg county will vote October 18 on \$50,000 bond issue for county hospital. Address Commissioners.

Tex., Mount Pleasant.—City Hall and Crematory.—City will vote September 16 on \$20,000 bond issue for city hall and crematory. Address The Mayor.

Tex., Palestine.—Library.—City will expend \$15,000 to erect Carnegie library; 59x56 feet; ordinary construction; hot-air heat; electric lighting; tile roof; proposals may be addressed to A. G. Greenwood. (Recently noted.)

Va., Orange.—Jail.—Orange County Court will improve jail, install cages and steel work, etc.; C. W. Woolfolk, Clerk.

Va., Richmond.—Rest Station.—City will receive bids until August 26 to erect rest station in William Byrd Park; revised plans, specifications, etc., at office of Carneal & Johnston, architects, 409 National Bank of Virginia, or at office of John E. Butler, building inspector; certified check for \$200. (Recently noted.)

W. Va., Hamlin.—Jail.—Lincoln County Commissioners are reported as to open bids August 29 to erect jail.

W. Va., Huntington.—Fire Station.—L. A. Pollock, Commissioner of Streets, Sewers, Wharf, Public Grounds and Buildings, will receive bids until August 27 to erect fire station on Third Ave. between 7th and 8th Sts.; plans and specifications at office of W. R. Smith, architect, Huntington. (Previously noted.)

COURTHOUSES

Ark., Helena.—Phillips county courthouse plans, now being prepared by Frank W. Gibb & Co., architects, Little Rock, Ark., will be completed about September 10; building 90x122 feet; steam heat; electric wiring; electric elevator; gravel roofing; E. F. Kitchens, commissioner. (Further facts recently noted, including estimated cost of \$250,000;

jail in connection to accommodate 72 prisoners, etc.)

Fla., Jacksonville.—Duval County Commissioners requested W. B. Tally, 315 St. James Bldg., Jacksonville, to submit plans for courthouse annex; cost about \$60,000. (Lately noted.)

Fla., West Palm Beach.—Palm Beach County Commissioners will receive bids until October 9 to erect courthouse; plans and specifications at office of W. B. Tally, architect, 315 St. James Bldg., Jacksonville, Fla.; Commissioners also accepted plans by Franz Safe & Lock Co., Jacksonville, for construction of vaults. (Previously noted.)

La., De Ridder.—Beauregard Parish Police Jury will receive bids until September 9 to erect courthouse and jail previously noted; reinforced concrete; electric lighting; steam heat; plans by Stevens & Nelson Co., Liverpool & London & Globe Annex, New Orleans, La. (See "City and County.")

Tex., Center.—Shelby County Commissioners awarded contract to G. R. Wright & Co. of Dallas, Tex., to erect annex to courthouse; cost \$14,000.

Tex., Corpus Christi.—Neuces County Commissioners are having plans prepared by Harvey L. Page & Co., 741 E. Houston St., San Antonio, Tex., for courthouse; fireproof; cost about \$175,000. (Recently noted.)

Tex., San Augustine.—San Augustine County Commissioners ordered election for November 8 to vote on \$90,000 bond issue to erect courthouse.

La., Oberlin.—Police Jury of Allen Parish will open bids September 4, addressed to R. C. Bond, president of jury, to erect courthouse; 68 feet 7 inches by 114 feet; fireproof construction; reinforced concrete and steel skeleton; exterior of pressed brick; oolitic limestone trimmings; interior finished in cement plaster, with ornamental plastic cornices and paneling; low pressure steam heat (in contract); interior lighting; cement sidewalk; composition roofing; cost \$75,000; plans by Favrot & Livaudais, New Orleans, La. (Recently noted.)

DWELLINGS

Ala., Birmingham.—Jeff Clay will erect cottage on Clarendon Ave.

Ala., Birmingham.—D. R. McElathery will erect \$6000 two-story residence; 11 rooms; press brick; metal roof; hot-water heat; electric lighting; plans and construction by owner. (Recently noted under "Stores.")

Ala., Birmingham.—Hillman-Watts Land Co. will erect 14 one-story frame dwellings at Avenue D and 26th St.; cost \$8300.

Ark., Conway.—Trustees of Hendrix College will erect residence for president; G. L. Bahner, E. R. Steel and W. B. Hubbell, building committee.

D. C., Washington.—Eli Fabre, 2554 Wisconsin Ave. N. W., will erect residence at 2585 Wisconsin Ave.; two stories; brick; cost \$4500; plans and construction by owner.

D. C., Washington.—Thomas A. Jameson, 329 H St. N. E., will erect four two-story dwellings at 611-617 4th St. N. E.; cost \$12,000; plans and construction by owner.

D. C., Washington.—H. L. Howenstein, 1314 F St. N. W., will erect three dwellings at 1617-21 Irven St.; cost \$9000; plans and construction by owner.

Fla., Orlando.—H. Carl Dann and Baxter Long will erect bungalow and bathhouse.

Fla., Miami.—J. V. Kloeber has plans by H. H. Mundy, Miami, for residence in Miramar addition; Italian architecture; stucco or concrete; red-tiled roof; fireplaces; tower staircase; cost \$8000; will also erect garage.

Fla., Orlando.—Dr. Cowell will erect residence and office building.

Fla., Pensacola.—Louis Anderson will erect 35x60-foot frame building; plans by Alfred & Alfred, Pensacola.

Fla., Tampa.—G. Pelligrina will erect three dwellings on 18th St. and Fourteenth Ave.; cost \$4500.

Ga., Atlanta.—M. C. Johnson will erect residence on Peachtree Rd.

Ga., Atlanta.—J. M. B. Hoxsey will erect two-story brick-vener residence at 982 Piedmont Ave.; cost \$14,000.

Ga., Atlanta.—W. C. McDonald & Bro., 3001 Morgan St., Tampa, Fla., will erect \$3000 frame residence; 36x50 feet; slate or tile roof; hot-water heat; electric lighting; plans and construction by owner.

Ga., Atlanta.—Mrs. Bernice Hatchett will erect one-story frame dwelling on 8th St.; cost \$3500; day labor.

Ga., Augusta.—Mrs. A. H. Brenner will erect residence; two stories; stucco; cost \$3000.

Ga., Augusta.—B. G. Bridwell will erect two-story residence on Whitney St.; cost \$300.

Ga., Lagrange.—Joe Delancy is receiving bids to erect two-story residence; plans by Charles W. Carlton.

Ky., Hazard.—Steve Hughes of Hazard-Dean Coal Co. will probably erect residence.

Ky., Henderson.—J. C. Oakes, Major, Engineers, Louisville, Ky., will receive bids until September 12 to erect four dwellings at Dam 48, Ohio River. (See "Government and State.")

Ky., Louisville.—G. E. Butterweck will erect brick residence at 1804 Windsor Pl.; cost \$5000.

Ky., Louisville.—Theodore Rectanus will erect two-story frame residence at 1154 S. 1st St.; cost \$3000.

Ky., Louisville.—Dr. R. L. Woodward will erect brick residence at 1830 Windsor Pl.; two and a half stories; cost \$12,000.

Ky., Louisville.—W. L. Arch will erect two-story brick-veneer residence in Shawnee Drive; cost about \$3500.

La., New Orleans.—E. G. Gould, 501 Hennessey Bldg., will open bids in October for erection of residence; 65x66 feet; cost \$9000; hot-air heat; cement sidewalk; Spanish green tile roofing; plans by Stevens & Nelson Company, 204 Carondelet, New Orleans. (Recently noted.)

La., New Orleans.—Paul Sere will erect two-story frame residence; cost \$5000.

La., New Orleans.—Albert Gullbault will erect two-story residence; cost \$5000.

La., New Orleans.—E. B. Mason prepared plans for three raised cottages in Pritchard Pl.

La., New Orleans.—John Redding will erect residence at Louisiana and Toldano Sts.; cost \$3400.

La., New Orleans.—Joseph L. Hautau will erect bungalow on Delschaise St.; cost \$3200.

Md., Baltimore.—J. E. Greiner is having plans prepared by Ellicott & Emmart, Union Trust Bldg., Baltimore, for residence at Guilford; two and a half stories; stone foundation; slate roof; electric lights; steam heat; hardwood floors.

Md., Baltimore.—Gordon Realty Co. has plans by Henry J. Tinley, 312 N. Charles St., Baltimore, for dwelling on 33d St. near Abell Ave.; two stories; iron spot brick; 26x29.11 feet; cost \$4000.

Md., Baltimore.—Henry H. Stabler, The Homewood, is having plans prepared for residence at Guilford.

Md., Baltimore.—Provident Realty Corporation, Garrison and Piedmont Aves., has plans by Henry J. Tinley, 312 N. Charles St., Baltimore, for three cottages in Beniah Villa; one at Elsinore and Alto Aves., 26x32 feet; one on Elsinore Ave. near Alto Ave., 28x30; one at Elsinore and Carlisle Aves., two and a half stories, 28x46 feet; cost \$12,000.

Md., Baltimore.—Joseph Berman, 231 Courtland St., purchased three acres of Weber Park property and will, it is reported, erect number of two-story dwellings.

Md., Frederick.—Ralph Baumgardner will erect two dwellings on W. 5th St. extended.

Md., Roland Park.—Layton F. Smith, 513 N. Charles St., Baltimore, Md., will erect residence on Underwood Rd.

Mo., St. Louis.—William Koedding will erect residence at 3760 Potomac St.; two stories; cost \$4000.

Mo., St. Louis.—Ed H. Poss will erect two-story dwelling at 4502 Tower Grove St.; cost \$4000.

Mo., St. Louis.—Clemens Degenhardt will erect dwelling and stores. (See "Stores.")

Mo., St. Louis.—John Markey will erect two one-story dwellings at 445 Penrose St.; cost \$4000.

Mo., St. Louis.—James Sullivan will erect three one-story dwellings at 2733-35-51 McCausland St.; cost \$4200.

Mo., St. Louis.—Lewis Realty Co. will erect three one-story dwellings at 3050-52-54 Bayard St.; cost \$5400.

Mo., St. Louis.—J. Gattenberger will erect dwelling and store at 2211 S. 39th St.; two stories; cost \$4000.

Mo., St. Louis.—H. Kollmeyer will erect dwelling and store at 5314 Lansdowne; two stories; cost \$3000.

N. C., Raleigh.—W. B. Drake will erect residence on N. Blount St.; frame; two stories; cost \$8000.

S. C., Anderson.—B. B. Gossett, president of Riverside and Tokaway Mills, has lot in North Anderson and will erect residence.

N. C., Rocky Mount.—Thos. Spooner is having plans for \$3500 bungalow prepared by John C. Stout, Rocky Mount.

Tenn., Bristol.—Thomas S. Brown, Newcomb Bldg., will erect Swiss cottage on Sunset Heights; metal tile roof; cost \$4000; plans by owner. (See "Machinery, etc., Wanted.")

Tenn., Chattanooga.—John Truitt will erect stone residence on 2d St. near Iine St.; cost \$4000.

Tenn., Knoxville.—C. B. Atkin purchased 150-acre site seven miles from Knoxville, and will erect bungalow.

Tenn., Nashville.—A. R. Hewitt will erect residence at 1021 15th St.; brick veneer; cost \$3000.

Tenn., Trenton.—J. A. Atkins will rebuild residence recently noted burned; plans not made.

Tex., Dallas.—W. L. Terrell will erect two four-room frame cottages at 2518-22 Meyers St.; cost \$3000.

Tex., Dallas.—Charles A. Moore will erect residence at 5005 Bryan St.; eight rooms; brick veneer; cost \$6800.

Tex., Dallas.—N. M. Harper will erect eight dwellings on S. Willomet Ave. and S. Edgefield St.; five rooms; frame; total cost \$12,000.

Tex., El Paso.—Mayfield Building & Improvement Co. will erect residence in Sunset Heights; cost \$3850.

Tex., Houston.—E. L. Ross will erect 10-room dwelling and servants' house on Hadley Ave.; cost \$4200.

Tex., Houston.—W. C. Hardcastle will erect six-room cottage on Fargo St.; cost \$3300.

Tex., Houston.—Houston Land Corporation will erect residence on Avondale Ave.; two stories and basement; cost \$13,500.

Tex., San Antonio.—Fred D. Whiting will erect frame residence on W. Castello St.; cost \$3000.

Tex., San Antonio.—Otto Meerscheldt will erect dwelling; nine rooms; brick; cost \$12,000.

Va., Danville.—W. H. Pierce has plans by McLaughlin & Johnson, Lynch Bldg., Lynchburg, for stucco residence costing about \$6000.

Va., Fishersville.—Calvary Methodist Church will erect parsonage. Address The Pastor, Calvary Methodist Church.

Va., Lynchburg.—James R. Gilliam is having plans prepared by McLaughlin & Johnson, Lynch Bldg., Lynchburg, for \$25,000 residence on Madison St.; stucco on metal lath, waterproofed; tile roofs; porticos, terraces and porches of 4x4 tile roofing; also erect garage. Address architects.

Va., Tenn., Bristol.—F. C. Wright, Washington, D. C., has plans by Thomas S. Brown, Newcomb Bldg., Bristol, for bungalow in Clifton Heights; cost \$3500.

GOVERNMENT AND STATE

Fla., St. Petersburg.—Armory.—City Commissioners will ask State for appropriation for erection of armory.

Ky., Henderson.—Dwellings.—J. C. Oakes, Major, Engineers, Louisville, Ky., will receive bids until September 12 to erect four brick dwellings at Dam 48, Ohio River, six miles below Henderson; information on application.

Ky., Hopkinsville.—Postoffice.—Treasury Department, office supervising architect, Washington, D. C.—Proposals received until September 29 for construction (including plumbing, gaspiping, heating apparatus, electric conduits and wiring, interior lighting fixtures and approaches) of United States postoffice; two stories and basement; about 5470 square feet ground area; fireproof construction; stone facing; copper roof; drawings and specifications obtainable from custodian of site, or at this office, at discretion of O. Wenderoth, supervising architect.

Okla., Muskogee.—Postoffice.—Treasury Department, O. Wenderoth, supervising architect, Washington, D. C., asks bids until September 26 for mechanical equipment for postoffice and courthouse previously noted erected. (See "Machinery Wanted.")

Va., Wytheville.—Postoffice.—Treasury Department, office of supervising architect, Washington, D. C.—Proposals received until September 30 for construction (including mechanical equipment, interior lighting fixtures and approaches) of one-story-and-basement stone and brick-faced building of 4100 square feet ground area, fireproof construction (except roof) for United States postoffice; drawings and specifications obtainable from custodian at Wytheville, or at this office, at discretion of supervising architect, O. Wenderoth.

HOTELS

Fla., Long Boat.—Street Lightfoot of Tampa, Fla., purchased Long Boat Key and will erect 100-room hotel, bathhouses, bathhouses, postoffice, etc., in connection with development of seaside resort. (See "Land Developments.")

Ky., Hazard.—Beaumont Hotel Co. will erect annex to hotel.

La., New Orleans.—Estate of A. Monteleone, J. D. Kenny, representative, it is reported, will erect 12-story annex to Monteleone Hotel at Royal and Iberville Sts.

Mo., St. Louis.—Warwick Hotel Co. will be incorporated with \$125,000 capital stock by James E. Buchanan, W. R. Bright, J. R. McCloskey and others to erect hotel at 15th and Locust Sts.; is having plans prepared by G. F. A. Brueggemann, Third National Bank Bldg., St. Louis. (John H. Bogue recently noted as promoting erection of hotel on this site.)

N. C., Raleigh.—S. Brown Shepherd will erect building to contain rooms for hotel, etc. (See "Stores.")

N. C., Wilmington.—C. E. Creanamy, president of Fidelity Trust & Development Co., is reported as interested in organization of company with \$250,000 capital stock to erect tourist hotel on portion of Sunset Park property; about 400 rooms; will dredge canal, provide tennis courts, golf links, etc.; Fidelity Trust & Development Co. wires Manufacturers Record: "Hotel proposition not yet in tangible form."

Va., Monterey.—A. V. Huyler of New York, H. M. Lewis, Staunton, Va.; Joseph S. Gibson, Monterey, and John H. Mackey purchased Bolser Springs property at Highland, and will erect hotel. (See "Land Developments.")

Va., Roanoke.—Ponce de Leon Hotel Co. organized and purchased Ponce de Leon Hotel at Commerce St. and Campbell Ave. for \$115,000; will remodel, install elevators, provide hot and cold water in all rooms, etc.; Funkhouser and Adamson will be managers.

W. Va., Bluefield.—Bluefield-Graham Fair Association, B. C. Banks, secretary, contemplates erection of summer hotel.

MISCELLANEOUS

Ark., Little Rock.—Fair.—Pulaski County Fair Association, capital stock \$50,000, incorporated with Joe Asher president, C. J. Griffith vice-president, Charles E. Leifer secretary, and Charles S. Stiff treasurer.

Fla., Long Boat.—Bathhouses, etc.—Street Lightfoot of Tampa, Fla., will erect bathhouses, postoffice, etc. (See "Hotels.")

Fla., Orlando.—Boathouse.—H. Carl Dann and Baxter Long will erect boathouse, etc. (See "Dwellings.")

Fla., Tarpon Springs.—Stable.—J. H. McNeil will erect livery stable on Lemon St.

Ga., Americus.—Hospital.—Sayre & Baldwin, Anderson, S. C., are preparing plans for \$20,000 hospital; brick; slate roof.

Ga., Rome.—Hospital.—Curry Hospital was incorporated with \$50,000 capital stock by J. W. Curry, J. C. Watts and W. L. Funkhouser.

Ga., Savannah.—Home.—Salvation Army, Horace Dodd, Major, Jacksonville, Fla., will double sleeping accommodations at Salvation Army Home, and later erect headquarters building.

Ky., Lexington.—Stable.—Harbison, Patterson & Jewell will erect building to replace Tattersall's stable on South Broadway; frame; stone foundation; fireproof roof; cost \$5000. (Recently reported burned.)

Ky., Louisville.—Clubhouse.—Boulevard Athletic Club will erect clubhouse.

Ky., West Point.—Skating Rink.—George Markham, Covington, Ky., will erect skating rink. (See "Theaters.")

Mo., Kansas City.—Stable and Garage.—H. D. Bell, 1913 Troost Ave., will erect stable and garage; frame construction; day labor.

Mo., St. Louis.—Hospital.—Jewish Kosher Hospital Association, B. Burenstein, chairman of building committee, will erect hospital building to cost \$30,000.

Mo., Webster Grove.—Natatorium, etc.—William M. Everett, Thomas Bassett and associates, all of St. Louis, Mo., will erect structure to contain natatorium and auditorium for moving-picture theater; two stories; brick and stone; fireproof.

Okla., Sand Springs.—Hospital.—Charles Page and Dr. Daniel W. White, both of Tulsa, Okla., have preliminary plans for proposed trachoma hospital.

Tenn., Knoxville.—Dairy Barn.—James and O. C. Haddox of Little River Creamery will

rebuild barn lately reported burned with loss of \$7000.

Tex., Port Arthur.—Barns and Sheds.—Texas Company, main office, Houston, Tex., will reconstruct barns and vehicle sheds recently burned; concrete foundations; frame superstructure.

Tex., Freeport.—Clubhouse.—Brazoria County Country Club has plans for clubhouse on Quintana Beach, near Freeport.

Tex., Dallas.—Fair.—Southwestern Portland Cement Co. will erect exhibit building at Fair Grounds; cost \$4000.

Tex., San Antonio.—Clubhouse.—Rockhill Country Club incorporated with \$500,000 capital stock by J. P. Withers, J. H. Savage, Harvey L. Page and others; will erect clubhouse, two 18-hole golf courses, etc.

Va., Newport News.—Hospital.—Chamber of Commerce is interested in erection of hospital; cost \$30,000; plans not determined.

Va., West Point.—Auditorium.—J. Welford Owens will erect auditorium.

W. Va., Bluefield.—Hospital.—Dr. C. M. Scott of St. Luke's Hospital will remodel and enlarge buildings adjoining hospital and connect with present structure; will remove present fronts of double building, extend building on line with hospital, erect additional story, entrance in center of entire building, provide roof garden, etc.

RAILWAY STATIONS, SHEDS, ETC.

Ga., Lawrenceville.—Seaboard Air Line Railway, W. D. Faucette, chief engineer, Portsmouth, Va., will erect depot; brick veneer, covered with red tile; cement walks.

N. C., Shouals.—Southern Railway Co., B. Herman, chief engineer, 1300 Pennsylvania Ave. N. W., Washington, D. C., will erect combination freight and passenger depot.

Okla., Tulsa.—St. Louis & San Francisco Railway Co., V. K. Hendricks, engineer, Springfield, Mo., will, it is reported, erect freight station; two stories; brick and concrete; fireproof; two blocks long and in two sections; also awarded contract to enlarge ticket office in passenger station.

S. C., Union.—Union & Glenn Springs Railroad, W. F. Arthur, general manager, will, it is reported, erect freight depot.

SCHOOLS

Fla., Anna Maria.—City will erect school to cost \$2500. Address The Mayor.

Fla., Orlando.—Special Tax School District No. 24 will vote September 16 on \$4000 bond issue for improvements to school. Address School Commissioners.

Fla., Wildwood.—Wildwood School District voted \$15,000 bond issue to erect school. Address District School Trustees. (Recently noted.)

Ga., Royston.—City is having plans prepared by Sayre & Baldwin, Anderson, S. C., for school building to cost \$25,000; mechanical heat; slate roof; contract to be let September 15. (Recently noted.)

Ky., Lexington.—Trustees St. Paul's Church will let separate contracts about August 28 to erect parochial school; ordinary construction; 68x130 feet; cost \$20,000; vacuum steam heat; Barrett Specification roofing; plans by Smith & Bedford, Lexington. (Recently noted.)

Miss., Hattiesburg.—Mississippi Woman's College has plans by R. H. Hunt, Chattanooga, Tenn., for \$50,000 administration building. (Previously noted.)

Mo., Liberty.—William Jewell College, it is reported, has plans for \$200,000 science building; Dr. H. G. Parker in charge science department.

N. C., Bethesda (not a postoffice).—Durham county, C. W. Massey, superintendent, Durham, N. C., will erect schools at Bethesda and Mineral Springs, to cost \$5000 each.

N. C., Greenville.—School District No. 8, Chocod township, Pitt county, will probably vote on bond issue to erect school; two stories; four rooms and auditorium; brick; D. G. Moore, J. J. Elks, S. W. McLeod and others are interested.

N. C., Greensboro.—Morehead township voted \$10,000 bond issue to erect school. Address Guilford County Commissioners. (Recently noted.)

Okla., Tulsa.—City will call second election to vote on bond issue for schools. Address The Mayor. (Lately noted as having defeated bond issue.)

S. C., Charleston.—Medical College of South Carolina, G. McF. Mood, secretary building committee, has plans by Todd & Benson, Charleston, for building; 120.5x55 feet; Ionic design; pressed-brick exterior; limestone trimmings; fireproof roof; concrete and pile

foundation; furnace heat; gas and electric lighting; administrative offices on first floor; laboratories, lecture-rooms and storerooms on second and third floors; cost \$75,000; C. C. Wilson, consulting architect, Columbia, S. C. (Previously noted.)

S. C., Rock Hill.—Rock Hill District School Board opened bids to erect proposed high school; J. J. Keller & Co., Rock Hill, are lowest bidders at \$25,997.

Tenn., Alamo.—Alamo School District voted \$12,000 of bonds to erect school building. Address School Trustees.

Tex., Bloomington.—School Board accepted plans by Hull & Praeger, Victoria, Tex., for \$10,000 school.

Tex., Fort Worth.—Trustees of Van Zandt School District, W. O. Millican, secretary, will receive bids until August 25 through Van Slyke & Woodruff, architects, 515 W. 5th St., Fort Worth, to erect school; plans from architects on deposit of \$10; Tarrant County Commissioners will erect school in Common School District No. 18; Euless School District No. 95 will issue \$7,000 of bonds to erect school. Address County Commissioners.

Tex., Hartley.—Hartley School District will erect school; \$15,000 of bonds available. Address School Commissioners.

Tex., Hubbard.—City voted \$20,000 of bonds to erect high school. Address The Mayor. (Lately noted.)

Tex., Richardson.—Richardson Independent School District will probably open bids about September 15 to erect school; 67 feet 8 inches by 96 feet 8 inches; brick and concrete; mill construction; jacketed furnaces with ventilators; electric lighting; gravel roof; cost \$13,500; plans by Sparger & Peters; proposals may be addressed to Virgil Walton. (Previously noted.)

Tex., Terrell.—Terrell School Board opens bids and will let contract August 24 to erect school; 60x80 feet; fireproof construction; hot air and fan system of heating; tar and gravel roof; cost \$14,000; plans by Van Slyke & Woodruff, 515 W. 5th St., Fort Worth, Tex. (Recently noted.)

Va., Eastville.—School Board, T. P. Bell, clerk, Machipongo, Va., will receive bids until September 15 to erect brick school building; plans and specifications at office of Mr. Bell, or may be had on deposit of \$10.

Va., Lexington.—Virginia Military Institute is reported as having plans prepared by Cram, Goodhue & Ferguson, 2 W. 47th St., New York, for college buildings and three buildings for officers.

Va., Lynchburg.—Virginia Theological Seminary and College (colored) is having plans prepared by McLaughlin & Johnson, Lynch Bldg., Lynchburg, for addition to college buildings. Address architects.

Va., Margo.—Livingston School Board, J. A. Villard, secretary, McHenry, Va., will open bids August 23 for erection of school building; one story; 60x75 feet; frame; tin shingle roof; plans by Philip N. Stern, Fredericksburg, Va. (Recently noted.)

W. Va., Bebee.—Board of Education of Proctor District, J. F. Haudenschilt, secretary, will receive bids until August 26 to erect school at Mt. Olive, near Bebee; plans and specifications at secretary's office.

W. Va., Manown.—R. F. D. from Kingwood. Board of Education, Kingwood District, will erect \$2400 30x55-foot ordinary construction school building; slate roof; plans by Holmboe & Lafferty, Clarksburg, W. Va.; bids opened August 18.

STORES

Ala., Birmingham.—M. P. Messer and associates are reported as considering erection of store building at Third Ave. and 21st St.; 12 stories.

Ala., Birmingham.—Mrs. J. Rivers Carter will erect six one-story store buildings at Second Ave. and 24th St.; cost \$16,000.

Ark., Little Rock.—William Peterson will erect one-story store building at 318-20-22 Center St.; cost \$8000.

Ark., Stephens.—S. P. McClurkin & Sons will erect brick building.

D. C., Washington.—Vanderbilt University Trustees will remodel building at S. E. Cor. Broadway and Ninth Ave. (See "Bank and Office.")

Fla., Jacksonville.—Central Investment Co., P. A. Holt, president, will remodel stores on Maloney property, etc. (See "Theaters.")

Fla., Miami.—J. G. McCrory of J. G. McCrory Company of New York will remodel building on 12th St. for store and hotel; frontage 50 feet; will support upper stories on steel beams, install front, curved plate-glass windows, utilize 25 feet of frontage for lobby, provide concrete stairway five feet wide, steel, concrete and tiling porch; hotel

portion will contain 40 sleeping-rooms, 32 of which will be connected with private baths; cost of improvements \$15,000 to \$20,000; plans by August Geiger, Miami.

Ga., Adairsville.—Dr. Joe P. Bowdin will rebuild burned store; two stories; brick.

Ga., Gainesville.—Griffith Bros., Route 9, Gainesville, will erect mercantile building; brick.

Ga., Macon.—Atlantic National Fire Insurance Co., John J. McKay, general manager, will remove structure to adjacent lot and remodel for store and office building. (See "Bank and Office.")

Ky., Hazard.—R. D. Baker and W. M. Pursfull will let contract September 1 to erect building. (See "Bank and Office.")

Ky., Louisville.—Joseph Fieitz will erect store at 628 S. 11th St.; brick; cost \$3000.

Ky., Louisville.—Roy E. Warner will erect business building at 3d and Breckenridge Sts.; three stories; cost \$30,000 to \$40,000.

La., Homer.—J. G. Gladney, Minden, La., has plans by Stewart Moore, Texarkana, Ark.-Tex., for three stores; one 33x100 feet, and two 26½x100 feet; fireproof; electric lighting; reinforced concrete and gravel roof. (Recently noted.)

La., New Orleans.—Joe Eresco has plans by E. M. Reynes for store at Barracks and Decatur Sts.; three stories; brick.

La., New Orleans.—J. Cusimano has plans by E. M. Reynes for store at Chartres and Barracks Sts.; four stories; brick.

Mo., Joplin.—John A. Taylor of Springfield, Mo., will erect business building on 4th St. and Virginia Ave.; three stories; cost \$50,000.

Mo., Kansas City.—South Side Investment Co. is having plans prepared by Holabird & Roche, Kansas City, and Monroe Bldg., Chicago, Ill., for arcade building at 24th and Main Sts.

Mo., St. Louis.—Clemens Degenhardt will erect two-story dwelling and stores at 5401 Virginia Ave.; cost \$6000.

Mo., St. Louis.—J. Guttenberger will erect store and dwelling at 2211 S. 39th St.; two stories; cost \$4000.

Mo., St. Louis.—Mrs. Esther Sparbur will erect store and apartment-house on Easton Ave.

Mo., St. Louis.—August G. Hufnagle will erect store and apartments on Cherokee St. near Michigan Ave.

Mo., St. Louis.—H. Kollmeyer will erect store and dwelling at 5314 Lansdowne; two stories; cost \$3000.

N. C., Albemarle.—Blackwelder & Ritchie will erect business building; two stories; brick; frontage 24 feet.

N. C., Greenville.—Higgs, Hardee & Laughlinhouse will receive bids until September 1 to erect store and office building. (See "Bank and Office.")

N. C., Raleigh.—S. Brown Shepherd will erect building to contain three stores, laundry and hotel rooms; four stories; tile roof; brick; cost \$25,000.

N. C., Tryon.—E. E. Missildine has plans by William E. Strong, Tryon, for store and office building; 29x75 feet; ordinary construction; steam heat; electric lighting; Barrett's specification roofing; cost \$7000; contract let August 20. (Recently reported burned.)

Okla., Yale.—Yale Wholesale Grocer Co. contemplates erection of stone building, 50x120 feet, with basement.

Tenn., Erwin.—L. H. Phetteplace, general superintendent of Carolina, Clinchfield & Ohio Railroad, will erect business building on Main St.; brick; porch of pressed brick and plate glass; J. H. Bowditch will superintend construction.

Tenn., Cookeville.—A. G. Maxwell and R. L. Farley will erect brick arcade building; two stories; steam heat; electric lights.

Tenn., Erwin.—N. T. Tucker will erect business building; brick.

Tex., Dallas.—Mellett Bros. will erect store at 201-3-5 Haskell St.; two stories; brick; cost \$11,825.

Tex., Dallas.—J. Henenberg will erect two one-story store buildings at 2216 Main and 2550 Elm Sts.; cost \$10,000.

Tex., Rosebud.—Benton-Wiley Company will erect store on Avenue C; two stories; brick.

Tex., San Antonio.—George Lehr will erect brick store building on E. Commerce St.; cost \$3200.

Tex., San Marcos.—J. M. Cape has plans by Roy Thomas, Austin, Tex., for store and office building; 78x80 feet; fireproof construction; steam heat; electric lighting;

electric elevators; gravel roof; cost \$25,000; plans ready in 38 days. (Recently noted.)

Va., Norfolk.—Steiff Piano Co. leased second floor of Lennox Bldg. and will install showroom, concert hall, etc.; about 10,000 square feet of floor space available.

W. Va., Wheeling.—Hub Clothing Co. acquired Hill-Richards property on Chapline St. and will erect three or four-story building to connect with present store on Market St.; will also remodel Scotch Woolen Mills Co. and Rosenberg Bros.' buildings and use in connection with present and new structures; plans by E. B. Franzheim of Wheeling.

THEATERS

Fla., Jacksonville.—Central Investment Co., P. A. Holt, president, will improve Maloney property on Adams St. between Main and Laura Sts.; will remodel stores on property and erect theater in rear on site 65x105 feet; seating capacity 1200; will lease to Montgomery Amusement Co.; cost of improvements \$25,000 to \$30,000.

Ky., West Point.—George Markham, Covington, Ky., will erect theater and skating rink.

Mo., Webster Grove.—William M. Everett, Thomas Bassett and associates will erect auditorium for moving pictures. (See "Miscellaneous.")

BUILDING CONTRACTS AWARDED

APARTMENT-HOUSES

Ala., Birmingham.—E. M. Tutwiler awarded contract to W. P. Bannon, Louisville, Ky., to plaster Ridgely Apartments, for which Wells Bros. Company, New York, has general contract. (Previously noted.)

D. C., Washington.—James O'Donnell, 1710 16th St. N. W., awarded contract to Peter Fersinger to erect apartment-house at 322 15th St.; four stories; cost \$28,000; plans by Rales & Edmunds.

D. C., Washington.—Ontario Apartment-House Co., 18th St., Cor. Ontario Rd., N. W., awarded contract to J. L. Mitchell to repair six-story apartment-house on Ontario Rd.; cost \$4000; plans by Kendall & Smith, Southern Bldg., Washington.

Fla., Stuart.—Mrs. Frank Cassidy of Stuart and Mrs. Mary H. Kimberly, New Castle, Pa., awarded contract to S. A. Mathews of Stuart to erect previously-noted building; 16 apartments and 10 single rooms; three stories; 46x108 feet; frame; fire protection; shingle roof; eight dormer windows; electric lighting; concrete walks; plans by G. G. Matchett, Stuart; owner will furnish building. (See "Machinery Wanted.")

La., New Orleans.—L. M. Daigain awarded contract to Martin Shepard to erect duplex apartment-house on Louisiana Ave.; cost \$5000.

Tex., Fort Worth.—A. J. Sandegard awarded contract to E. F. Moore, Fort Worth, to erect three-story 75x100-foot building; cost \$40,000; plans by L. B. Weinman, Fort Worth; automobile salesrooms first floor; bachelor apartments on second and third floors; mill construction, with brick walls, steel columns and girders; first floor all glass front; gravel roof; gas heating; electric lighting.

BANK AND OFFICE

Ala., Birmingham.—Jefferson County Savings Bank awarded contract to W. P. Bannon, Louisville, Ky., for plastering bank and office building, for which F. W. Mark Construction Co., Birmingham, has general contract. (Previously noted.)

Ark., Arkadelphia.—Merchants and Planters' Bank awarded contract to Nathan O'Neal of Gurdon, Ark., to erect bank building.

Ga., Atlanta.—J. H. Porter and Luther Z. Rosser awarded contract to Gude & Co. for addition and improvements to structure at 63-65 N. Pryor St. for office building; install elevators, etc.; cost \$15,000.

Md., Sudlersville.—Sudlersville Bank awarded contract to Harry P. Carlon, Wilmington, Del., to erect bank building; stone construction; cost \$11,333; plans by Brinckloe & Canning, Easton, Md. (Previously noted.)

Tex., Dallas.—Stanard-Tilton Milling Co., St. Louis, Mo., awarded contract to erect office building. (See "Flour, Feed and Meal Mills.")

Tex., El Paso.—Great Western Oil Co. has plans by and awarded contract to Phoenix-El Paso Building Co., El Paso, for rebuilding warehouse and office building; 40x60 feet; ordinary construction; tar and gravel roof; cost \$3000. (Recently reported burned.)

W. Va., Warwood.—L. H. Hoffman, Main St., will erect theater.

WAREHOUSES

Ala., Foley.—Farmers' Trucking Association is considering erection of sweet potato storage warehouse.

Ala., Bay Minette.—Farmers' Trucking Association appointed committee to receive bids to erect sweet-potato storage warehouse; capacity 8000 to 10,000 bushels.

Ky., Carrollton.—O. M. Wood & Son will erect brick loose-leaf tobacco warehouse; 150x200 feet.

N. C., Walnut Cove.—Stokes County Tobacco Warehouse Co. incorporated with \$10,000 capital stock by R. J. Joyce, J. C. Joyce and others.

S. C., Anderson.—Texas Co., main office, Houston, Tex., will erect structure to replace burned building; brick and stone; fireproof; O. F. Taylor, local agent. (Recently reported burned at loss of \$9000.)

Tex., Dallas.—Shippers' Compress & Warehouse Co. will erect 60,000 square feet of platform; cost \$6000.

Va., Norfolk.—Talbot Bros. have plans by John Kevan Peebles, Norfolk, for six-story addition to building at 101-103 Main St.; semi-fireproof; also for remodeling present structure; will be occupied by Old Dominion Paper Co.; bids opened. (Recently noted.)

CHURCHES

Ky., Columbia.—Baptist Church building (contract recently noted awarded to J. C. Miller, Crocus, Ky.) will be of ordinary construction; 62x90 feet; cost \$12,000; hot-air heat; electric lighting; metal roofing; plans by R. H. Hunt, Chattanooga, Tenn. (See "Machinery Wanted.")

Tex., Kenedy.—Baptist Church will expend \$12,500 to erect building recently noted; 73x73 feet; brick; electric lighting; metal tile roof; plans by H. Babbs, Yoakum, Tex.; contract awarded to Neuman Bros., Kenedy. (See "Machinery Wanted.")

CITY AND COUNTY

Ala., Bay Minette.—Jail.—City awarded contract to Southern Structural Steel Co., Birmingham, to erect jail; W. D. Stapleton, Mayor. (Recently noted.)

Ala., Birmingham.—Warehouse.—City awarded contract at \$6874 to Standard Contracting Co., Birmingham, to erect warehouse; brick and concrete; about 140x40 feet; also erect repair shop to cost \$600. (Recently noted.)

Fla., Jacksonville.—City Hall.—City awarded contract at \$3550 to Owens Building Co. to alter and enclose outside court in city hall and provide more floor space.

Fla., West Tampa, Station Tampa.—Library.—City awarded contract to G. A. Miller, Tampa, to erect library building; one story and basement; 45x60 feet; mill construction; cost \$16,000; composition gravel roof; plans by John W. Biggar, West Tampa. (Recently noted.)

Ky., West Point.—Jail.—City awarded contract to erect jail building to include police courtroom, also room for chemical engine; concrete and brick; steel cell. Address The Mayor.

Tex., Crockett.—Jail.—Houston county jail (contract recently noted awarded to Southern Structural Steel Co., San Antonio, Tex.) will be of semi-fireproof construction; contract price \$16,000; 35x54 feet; Barrett specification roofing; steam heat; electric lighting; plans by contractors. (See "Machinery Wanted.")

COURTHOUSES

Ark., Little Rock.—Pulaski County Commissioners awarded contract to C. H. Britton, Pine Bluff, Ark., for ornamental work on annex to courthouse, including decorating walls of 38 rooms. (Recently noted.)

W. Va., Wellsburg.—Brooke county awarded contract to A. S. Craig Company, Follansbee, W. Va., to erect addition to courthouse; cost \$7500; two stories; brick; 24x52 feet; steam heat; electric lighting; four-ply built-up roofing; plans by M. L. Wells, Wellsburg, W. Va. (Recently noted.)

DWELLINGS

Ala., Gadsden.—John Inzer awarded contract to erect bungalow on Lookout Mountain.

Ark., Texarkana.—P. G. Henry awarded contract to erect six-room cottage at 9th and Maple Sts.

D. C., Washington.—C. H. Wells, 3813 7th St. N. W., awarded contract to John Piland to erect two-story dwelling at 3900 McKinley St.; cost \$6210; plans by Mack Williams.

D. C., Washington.—G. P. Hales, 1406 G St. N. W., awarded contract to William P. Harper, 717 14th St. N. W., to erect residence; cost \$5500; plans by owner.

D. C., Washington.—Charles L. Sturtevant, 2110 Bancroft Pl. N. W., awarded contract to C. A. Langley, 310 12th St. N. W., to erect dwelling at 2110 LeRoy Pl. N. W.; cost \$24,000; plans by T. J. D. Fuller, 806 17th St. N. W., Washington.

D. C., Washington.—J. L. Sherwood, Queens Chapel Rd. N. E., awarded contract to J. Whitely, 1028 Lawrence St. N. E., to erect dwelling at 1300 Monroe St. N. W.; two stories; cost \$4000; plans by David H. Gortly.

D. C., Washington.—Louis C. Lehr, 1737 H St. N. W., awarded contract to Clark Waggaman, 1124 Connecticut Ave. N. W., Washington, to erect dwelling at 1627 New Hampshire Ave.; four stories; brick; cost \$30,000.

Fla., Tampa.—W. Preston Jackson, Box 680, Tampa, awarded contract to Edwards Construction Co., Tampa, to erect bungalow; six rooms; 1½ stories; ordinary construction; gas heaters and coal grate; electric lighting; vulcanite asphalt shingle roof; walls covered with Bishopric wall board; cost \$3000; plans by Bonfoey & Elliott, Tampa. (Recently noted.)

Ga., Augusta.—E. C. Ford awarded contract to A. F. Lacey to erect dwelling; two stories; frame; cost \$3000.

Ga., Hazlehurst.—J. H. Moore awarded contract to J. B. Sargent, Dahlgren, Ga., to erect 10-room frame residence; slate roof; brick pavement; plans by McMahon, Memphis, Tenn.; materials supplied.

Ga., La Grange.—Steve Thornton awarded contract to Pike Bros. Lumber Co. to erect residence.

Ky., Louisville.—F. F. Gilmore, 2725 Victor Ave., has plans by and awarded contract to A. W. Saunders, Vernon Ave., Louisville, to erect residence; 30x30½ feet; two stories; frame; shingle roof; cost \$3000. (Recently noted.)

La., Lake Charles.—Calcasieu Building and Loan Association awarded contract to erect cottage on Cleveland St., and has plans for two other dwellings.

La., New Orleans.—Third District Building Association, 2901 Royal St., W. F. Scheele, secretary, has plans by and awarded contract to Hy. Ortland, 1653 N. Robertson St., New Orleans, to erect one single and one double dwelling, to cost \$5635; frame; green slate roof; gas and electric lighting; Schillinger pavement. (Recently noted.)

Md., Baltimore.—Francis E. Yewell, 501 Title Bldg., awarded contract to M. T. Green to erect dwelling on Fairview Ave.; two and a half stories; frame; 26x35 feet; cost \$3500; plans by John R. Forsythe, 224 St. Paul St., Baltimore.

Md., Baltimore.—August Weber, president of German Bank of Baltimore—City, Baltimore and Holiday Sts., has plans by Callis & Callis, Knickerbocker Bldg., Baltimore, for 40 dwellings at Darley and Greenmount Aves.; two stories; iron-spot brick; 14x45 feet; awarded contract to Frank Novak, 744 N. Kenwood Ave., Baltimore.

Md., Roland Park.—John R. Williams, Jr., 508 Winslow Rd., awarded contract to Roland Park Co., 406 Roland Ave., Roland Park, to erect residence; two stories and a half; brick and frame; concrete foundation; slate roof; steam heat; cost \$10,000; plans by Edward L. Palmer, Jr., 408 Roland Ave., Roland Park. (Recently noted.)

Mo., St. Louis.—Dr. Joseph G. Pfaff awarded contract to Charleville Contracting Co., St. Louis, to erect residence and garage on Washington Ave.; two stories and basement; brick and stone; hardwood floors, oak wainscoting; two bathrooms finished in marble and tile; slate roof; plans and supervision by Clymer & Drischler, 105 N. 7th St., St. Louis.

N. C., Whitney.—Southern Aluminum Co., It is reported, awarded contract to erect 246 dwellings for employees.

Tenn., Memphis.—James H. Malone awarded contract to J. M. Harris to erect residence at 325 Parkway; dwelling, 12 rooms; stone veneer; cost \$12,000; will also erect garage to cost \$1500.

Tex., Corsicana.—W. S. Holman, manager

of Corsicana Cotton Oil Co., awarded contract to erect \$9000 residence.

Tex., Dallas.—John L. Greenfield, 804 Southern Life Bldg., awarded contract to W. A. Thomas, 803 Southern Life Bldg., Dallas, to erect dwelling; ordinary construction; gas heat; electric lighting; shingle roof; cost \$3500. (Recently noted.)

Tex., Galveston.—W. T. Armstrong awarded contract to erect residence at 25th St. and Avenue O; hollow tile construction, stuccoed or cemented exterior; plans by Stowe & Stowe, Galveston.

Va., Lynchburg.—Gariand E. Vaughan awarded contract to W. B. Sneed & Co., Lynchburg, to make improvements to dwelling on Rivermont Ave.; cost \$5000; architects, McLaughlin & Johnson, Lynch Bldg., Lynchburg.

Va., Norfolk.—M. A. Smothers awarded contract to Goffigan & Salmon to erect two-story double brick dwelling at 39th St. and Park Ave.; cost \$5500.

GOVERNMENT AND STATE

Md., Cambridge—Hospital.—State, Phillips Lee Goldsborough, Governor, awarded contract at \$166,564 to E. D. Springer & Co., 424 S. Charles St., Baltimore, Md., to erect mess hall, laundry and power-house at Eastern Shore State Hospital for Insane; plans by Parker, Thomas & Rice, Union Trust Bldg., Baltimore, Md. (Recently noted.)

Mo., Poplar Bluff—Postoffice.—Government awarded contract to R. S. Moore, Lafayette, Ind. (recently noted as lowest bidder), to erect \$60,000 fireproof postoffice building; heating and lighting plants included; composition roofing.

HOTELS

Ala., Birmingham.—Tutwiler Hotel Co., awarded contract to W. P. Bannon, Louisville, Ky., for plastering Tutwiler Hotel, for which general contract was awarded to Wells Bros. Company, New York. (Previously noted.)

S. C., Great Falls.—Southern Power Co., Charlotte, N. C., awarded contract to Love & Owens, Rock Hill, S. C., to erect proposed \$7000 frame hotel; plans by Hook & Rogers, Charlotte.

MISCELLANEOUS

Ark., Little Rock—Infirmary.—St. Vincent's Infirmary awarded contract to Thalman & Reed, Little Rock, to remodel operating-room; will install skylights, tile floors and walls, plumbing, lighting and heating fixtures, sterilizing and operating apparatus, etc.; cost about \$18,000.

Ky., Lexington—Hospital.—Good Samaritan Hospital, It is reported, awarded contract to Congleton Lumber Co., Lexington, to erect nurses' home; cost about \$20,000.

Tenn., Chattanooga—Motordome.—Chattanooga Motorcycle & Supply Co. awarded contract to erect motordome; track will have angle of 65 degrees on racing surface, five laps to mile; cost \$10,000.

Tenn., Nashville—Fair.—State Fair Trustees awarded contract to H. M. Graham to repair grandstand and other buildings damaged by storm; cost about \$500. (Recently noted.)

Tex., Dallas—Clubhouse.—Lakewood Country Club awarded contract to J. W. Slaughter Construction Co., Dallas, to erect clubhouse; cost \$50,000.

RAILWAY STATIONS, SHEDS, ETC.

S. C., Darlington.—Atlantic Coast Line Railroad, E. B. Pleasants, chief engineer, Wilmington, N. C., awarded contract, It is reported, to erect depot. (Previously noted.)

SCHOOLS

Ala., Birmingham.—City awarded contract to erect temporary frame school buildings pending bond issue for permanent buildings; cost \$15,000. (Recently noted under "City and County.")

Fla., Tallahassee.—State College for Women dining hall (contract recently noted awarded to O. C. Parker, Tallahassee) will be about 90x117 feet; exterior walls brick; steam heat; tile and gravel roof; dumb waiter; cost about \$30,000. (See "Machinery Wanted.")

Md., Baltimore.—Johns Hopkins University, Edward B. Matthews, secretary, 1410 Linden Ave., awarded contract at \$234,500 to B. F. Bennett Building Co., 123 S. Howard St., Baltimore, to erect mechanical and electrical laboratory; three stories and attic; red brick; marble trimmings; 203x160 feet; machinery hall, 50x200 feet, will extend through two stories, largely of glass,

equipped with overhead traveling crane, etc., and connected by tunnel with power-house 60x120 feet; machinery hall to be completed June 1, remainder of structure August 1. (Recently noted.)

Mo., Columbia.—Curators of University of Missouri awarded contract at \$84,517 to J. W. Wilson & Son of Des Moines, Iowa, to erect biology building and live-stock pavilion; plans by James P. Jamieson, 900 Security Bldg., St. Louis, Mo. (Lately noted as receiving bids.)

Tenn., Lawrence.—W. H. Hartman, Lawrenceburg, has prepared plans for and will construct public school; two stories, with basement; brick; 64x74 feet; metal shingles.

Tex., Mineola.—School Board awarded contract at \$12,925 to S. R. Smith to erect school; two stories and basement; eight class rooms; plans by B. G. Leake, 20 Dundee Bldg., Fort Worth, Tex. (Lately noted.)

STORES

Ala., Marion.—C. H. Dozier awarded contract to Thomas Purvis & Sons to erect recently-noted store building for general merchandise; cost \$14,000; brick walls, metal ceiling and roof; glass fronts; stove flues through ceiling; cement sidewalk; electric lighting; hand elevator; plans by W. E. Bennis, Bessemer, Ala. (See "Machinery Wanted.")

Ala., Mobile.—S. Elchold awarded contract to Jett Bros. Contracting Co., Mobile, to erect wholesale building to be occupied by Mobile Drug Co.; 70x112 feet; four stories; mill construction; concrete steel columns; elevators; composition roofing; electric lights (in contract); cost \$40,000; plans by McCrary & Slater, Mobile. (Recently noted.)

Ark., Pine Bluff.—W. T. Brasher store-houses (contract recently noted awarded to Edgar Hogan, Pine Bluff) will be of brick and mill construction; one story; 60x90 feet; cost \$6000; composition roofing; electric wiring; concrete foundation and floor; plate-glass fronts; galvanized iron cornices.

D. C., Washington.—M. A. Luse awarded contract to R. P. Whitty to erect store at 710 11th St. N. W.; cost \$6700; plans by A. E. Landvoigt, 1338 G St. N. W., Washington.

Fla., Tampa.—L. J. Jones awarded contract to A. Bashford to erect business building at Lafayette and Water Sts.; yellow pressed brick; three stories; 180x115 feet; eight plate-glass store fronts; will construct steamboat landing, etc.; cost \$45,000. (Lately noted as rejecting bids for construction.)

Ga., Atlanta.—H. A. Almond will erect two-story brick-veneer building at 63 Servin St.; cost \$5000; awarded contract to S. E. Lilly.

Md., Baltimore.—Caroline Trippe and Alice H. Maslin awarded contract to Edward Waters & Co., 509 N. Charles St., Baltimore, to remodel building at 347 N. Charles St.; plans by C. M. Anderson, 324 N. Charles St., Baltimore; cost \$4000.

Md., Baltimore.—Isadore Noah, 2108 Callow Ave., awarded contract to Joseph Schamberger, 2122 E. Baltimore St., Baltimore, to erect store building at 529 S. Broadway; brick; 15x28 feet; concrete foundation; slag roof; electric lights; cost \$5500; plans by John Freund, Jr., Hoffman Bldg., Baltimore. (Recently noted.)

N. C., Charlotte.—Mercantile Development Co. awarded contract to Travers-Wood Company to erect 10 buildings on E. 1st St. between Church and Mint Sts.; 25x100 feet; three stories and basement; reinforced concrete; sprinkler system; electric elevators; plans by Hook & Rogers, Charlotte; is reported as considering erecting 10 additional buildings later. (Previously noted.)

RAILROAD CONSTRUCTION

RAILWAYS

Ala., Brent.—J. F. Johnston of Tuscaloosa is said to be the purchaser of the Birmingham, Selma & Pensacola Railway, extending from Brent to Harrisburg, nine miles. It is planned to extend the railroad to Selma. It was recently reported that a Northern syndicate had purchased the line.

Ala., Scottsboro.—Dr. R. V. Prince, says a report, is building a railroad 15 miles long to coal mines which he is opening near Lunyon.

Ark., Mountain Home.—W. K. Lohn of Chicago is quoted saying it is proposed to build an electric railway from the Frisco Railroad in Missouri to the White River division of the Missouri Pacific in Arkansas. It will probably begin at Seymour, Mo., and extend 80 miles to Cotter, Ark. More than \$250,000 has been subscribed.

Tex., Bartlett.—Gersbach Wacker Company awarded contract to Karl Flick to erect store; 70x140 feet; brick; 14,000 feet floor space.

Tex., Brenham.—George Wehrman and Gus Abendroth awarded contract to F. W. Wood to erect store building on Academy St.; 30x50 feet.

Tex., Dallas.—Mrs. Jules Schneider will expend \$35,000 to erect store building to be occupied by Goldsmith Dry Goods Co.; three stories and basement; hot-water heat; cost \$35,000; plans by Lang & Wittich, Dallas; contract recently noted awarded to A. D. Hayden.

Va., Richmond.—Dr. William H. Parker, 2215 E. Broad St., has plans by and awarded contract to Albert F. Hunt to erect two brick stores; ordinary construction; 36x90 feet; gravel roof. (Recently noted.)

THEATERS

Ark., Marianna.—P. D. McCouch has plans by and awarded contract to R. H. Thompson to erect moving-picture parlor to be occupied by Majestic Theater, C. B. Hunt, proprietor, Box 432; size of building, 22x103 feet; fireproof construction; cost \$3000. (See "Machinery Wanted.")

WAREHOUSES

Ala., Birmingham.—City awarded contract to Standard Contracting Co., Birmingham, to erect warehouse. (See "City and County.")

Ala., Mobile.—S. Elchold awarded contract to erect store and warehouse to be occupied by Mobile Drug Co. (See "Stores.")

Fla., Tampa.—Thomas & Bentley Hardware Co. awarded contract to L. Heath to erect warehouse at Ashley and Harrison Sts.; two stories.

Ky., Louisville.—American Tobacco Co. will erect warehouse to be occupied by Alfred Struck Co.; contracts let.

Ky., Paducah.—A. D. Dickerson Tobacco Co. will erect brick warehouse; two stories; 150x175 feet; cost \$9000; Jack Cole, contractor.

La., Thonwell.—Thornwell Warehouse Co., H. Neal, president, let contract to Spell & Sweeney, Lake Arthur, La., to erect warehouse; cost \$4000. (Recently noted.)

Md., Baltimore.—Pearl Street Permanent Savings and Building Association awarded contract to J. L. Robinson Construction Co., 66 Knickerbocker Bldg., Baltimore, to erect warehouse at 30 N. Pearl St.; three stories; 20x60 feet; tin roof; cost \$7000; plans by F. E. Beall, 306 St. Paul St., Baltimore.

Mo., Kansas City.—J. I. Case Threshing Machine Co., Racine, Wis., awarded contract to Raymond Concrete Pipe Co., New York and Chicago, Ill., to place concrete piles for foundation of branch warehouse; P. M. Adams, supervising architect. (Recently noted.)

Tex., Dallas.—Stannard-Tilton Milling Co., St. Louis, Mo., awarded contract to MacDonald Engineering Co., Monadnock Bldg., Chicago, Ill., to build warehouse of 300,000 square feet floor area. (See "Flour, Feed and Meal Mills.")

Tex., El Paso.—Great Western Oil Co. awarded contract to rebuild warehouse and office building recently reported burned. (See "Bank and Office Buildings.")

Va., Brookneal.—Bright Belt Warehouse Co., Wm. R. Walker, president (recently noted incorporated), awarded contract to W. L. Maddox, Brookneal, to erect \$6500 one-story tobacco sales warehouse; 60x185 feet; brick; tin roof; electric lighting; stove heating.

Fla., Arcadia.—E. Prouty of Arcadia says that estimates are being made for the construction of two other lines of railway in addition to the one proposed from Arcadia to Lake Okechobee.

Fla., Pensacola.—Contract is let by the Gulf, Florida & Alabama Railway for laying 20 miles of track on its extension north of Jonesville, Ala. G. A. Berry, Pensacola, is general manager. He is also quoted saying that as soon as this is finished another extension will begin from the end of this.

Ga., Irwinton.—The Irwinton Lumber Co. is reported making improvements to the Irwinton & McIntyre Railroad. The company proposes to eventually extend the road to Dublin and thence to some point on the coast.

Ga., Waynesboro.—The Brinson Railway,

says a report, has completed its extension of 12 miles from Waynesboro to St. Clair, Ga.

Ky., Smithland.—J. E. Massey and J. B. Trail of Smithland are reported promoting plans for the construction of an electric railroad from Smithland through Livingston county.

La., Mansfield.—The Mansfield Railway & Transportation Co. is reported to have completed about five miles of its extension to Naborton, altogether about 10 miles long. L. H. Bell, Sr., is chief engineer.

Mo., Poplar Bluff.—Articles of incorporation have been filed for a railroad 12 miles long to connect Piggott, Ark., with the southern terminus of the Butler County Railway, running south from Poplar Bluff, Mo., to the State line. The company has \$300,000 capital, and it is expected to have the road in operation before December 25. W. N. Barron of Poplar Bluff is vice-president and general manager of the Butler County Railroad Co. The directors are L. M. Palmer, Brooklyn; A. W. Brigham, East Orange, N. J.; G. Fred Royce, Passaic, N. J., and Charles Langlotz, C. A. Ridlon and Nelson Windsor of Poplar Bluff.

N. C., Andrews.—Contracts have been awarded, it is reported, for the construction of the Hiawasse Valley Railroad from Andrews via Hayesville, N. C., to Hiawasse, Ga., 35 miles. J. Q. Barker of Andrews, N. C., and others are interested.

N. C., King.—Rights of way are reported secured for proposed interurban electric car line from King to Vade Mecum Springs, N. C., and thence to Stuart, Va. W. D. Wilcox, a Northern capitalist, is one of the promoters.

S. C., Union.—The Union & Glenn Springs Railway Co. is planning to build an extension. W. F. Arthur is general manager at Union.

Okla., Ardmore.—Col. R. A. White of Ardmore will, it is reported, soon make a definite proposition to build an interurban railway which he contemplates.

Okla., Poteau.—Col. C. C. Godman of Fort Smith, Ark., says a report, has submitted a proposition to citizens to build a railroad from a connection with the Rock Island system at Monroe to the Fort Smith & Western and the Midland Valley Railroad at Bokoshe, about 45 miles. An extension might be made to Muskogee.

Okla., Tulsa.—Wm. B. Hawley of New York and Tulsa is reported about to incorporate a company for railroad construction and which will build about 400 miles of line when all its plans are fulfilled.

Okla., Tulsa.—H. F. Sinclair of Tulsa and others are reported planning construction of an electric interurban railway from Kansas City to Tulsa, Okla., about 275 miles, this to be done by linking up several lines by construction of extensions. Mr. Sinclair has gone to Europe to finance the enterprise. Tulsa, Bartlesville and Dewey, Okla., Coffeyville, Independence, Cherryvale and other points in Kansas are to be connected.

S. C., Columbia.—The Columbian Railway & Navigation Co., which proposes to build three miles of railroad from near Columbia to a point on the Congaree River, announces that it will apply for power to condemn lands and also that its stock subscription books will be opened September 15. G. A. Guignard, T. C. Williams and S. Terry are the incorporators.

Tenn., Dyersburg.—The Illinois Central Railroad will build a storage track of 90 cars capacity, additional team tracks of 36 cars capacity, and rearrange facilities for handling locomotives at Dyersburg. No extensive bridge work. Excepting grading, all work will be done by company's forces. A. S. Baldwin, Chicago, Ill., is chief engineer.

Tenn., Franklin.—O. D. Berroth of Kansas City, Mo.; H. H. Nelson of Wichita, Kans.; J. H. Coughlin of Omaha, Neb., and Ira McCalla of Fayetteville, Tenn., are reported promoting plans for the construction of a railroad from Franklin via Engleville and Shelbyville to Fayetteville, Tenn., about 72 miles. An abandoned roadbed built some years ago between Shelbyville and Fayetteville is to be utilized. A meeting was held by L. W. Buford, president of the Franklin Commercial Club, and others, and over \$6000 subscribed.

Tenn., Memphis.—Steps are being taken to organize the Rock Island-Memphis Terminal Railway Co. by Wright, Miles, Waring & Walker, attorneys, for the purpose of constructing the terminal facilities which will be used exclusively by the Rock Island System in Memphis in connection with the new bridge which is being built by the Arkansas & Memphis Railway Bridge & Terminal Co.

Incorporators are L. P. Miles, Roane Waring, C. H. Raine, B. L. Mallory and Ernest Adams. The work has been previously described and is simply separate from the bridge line and approaches which will be used in connection with the other roads interested.

Tex., Austin.—The Industrial Construction Co. of Chicago, Ill., has been awarded contract by the Great Northern & Gulf Central Railway Co. for building the road in the Colorado River Valley from some central Gulf port to the Panhandle. John Andrewartha is vice-president and chief engineer.

Tex., Corsicana.—L. E. Mitchell of Neosho, Mo., president of the Dallas, Corsicana & Palestine Railroad Co., is quoted in a report from Palestine, Tex., as saying that construction is proceeding on the line from there to Corsicana.

Tex., Dallas.—The Union Terminal Co. is reported having surveys made for terminal tracks, which it is estimated will cost \$2,000,000. Murrell L. Buckner is secretary Union Terminal Co.

Tex., Dallas.—The Missouri, Kansas & Texas Railway Co. says that the contract with Henry and William Butler of Dallas for burning a certain amount of ballast for the road has been cancelled because of the suit entered by the State of Texas against the road, which action caused the abandonment of much of the work proposed there. This refers to the recent announcement that a contract was let amounting to more than \$1,000,000.

Tex., Houston.—The Houston & Texas Central Railroad, according to a report quoting M. A. Westcott, right of way commissioner for that company, is considering a plan to build a cutoff from Eureka to Pierce Junction in order to avoid sending much freight through the Houston yards. W. G. Van Vleet is vice-president and general manager at Houston.

Tex., Mexia.—The Houston & Texas Central Railroad Co. has let contract to Karner Bros. for grading terminals south of Mexia.

Tex., San Angelo.—A mass-meeting of San Angelo citizens is reported to have raised \$1000 for preliminary survey to build a railroad from San Angelo to San Antonio, Tex., about 150 miles. The Mayor may be able to give information.

Tex., Temple.—The Missouri, Kansas & Texas has laid 70 miles of 85-pound steel rails on its line between Waco and Hoxie.

Tex., Terrell.—Plans are being made to build a railroad from Terrell to Tyler, Tex., and cities along the proposed route, which is to run via Wills Point, Canton, Ben Wheeler and Myrtle Springs, have pledged \$180,000. Among those interested are W. M. Raley, A. H. S. Dashiell, L. E. Griffith, James Grinnam, M. C. Roberts, A. R. Andrews and Dr. T. P. Davis of Terrell; M. K. Thomas, L. W. Richards and J. H. Vinson of Myrtle Springs; T. J. McKinnon and J. O. Fox of Wills Point; B. H. McKinnon, R. M. Lively and D. S. McPhail of Canton, and Dr. H. A. Castleberry, Berry Green and O. O. Morris of Ben Wheeler, Tex.

Tex., Van Horn.—The Van Horn Valley Land & Railway Co., capitalized at \$1,500,000, is organized in Minneapolis to build a railway through the entire valley, the northern terminus to be the southern boundary of New Mexico. R. H. Owen of Minneapolis, Minn., is president. Others interested are J. M. Daugherty, J. Y. Canon and Judge Joe Irby, all of Van Horn. President Owen telegraphs that the line will be standard gauge, 69 miles long, and will cost approximately \$10,000 per mile.

Va., Bluemont.—The Washington & Old Dominion Railway Co., according to a local report, has made survey for an extension from Bluemont to Berryville, Va., about 10 miles. O. H. Bundy, Washington, D. C., is chief engineer.

W. Va., Camden.—The Camden, Summersville & Gauley Bridge Railroad Co., with office in Charleston, W. Va., is chartered to build a railroad from Camden-on-Gauley via Summersville to Gauley Bridge, W. Va., about 45 miles. The incorporators are J. J. Meade of Pittsburgh, H. L. Kirtley, George W. McClintic, W. S. Mathews and J. N. Carnes of Charleston.

STREET RAILWAYS

Fla., Bradentown.—Reported that a street railway will be built from Bradentown to Cortez, about 1½ miles. Street Lightfoot of Tampa, Fla., may be able to give information.

Ky., Covington.—Bids will be received by the city government September 26 from 9 A. M. to 5:30 P. M. for a street railway franchise for about 25 miles of line within

the city limits, subject to a license tax. Address the City Clerk.

Ky., Louisville.—The Louisville & Interurban Railway Co. contemplates the construction of an extension from Orell to Kosmosdale. T. J. Monary of Louisville is president.

Okla., Oklahoma City.—Capital Traction Co. of Oklahoma City incorporated; capital \$10,000; incorporators, D. M. Wilson, H. S. Hurst and S. A. V. Howell of Oklahoma City.

S. C., Anderson.—Grading has begun on the North Anderson street-car line. Seventy-pound rails are to be laid. M. N. Patterson is the contractor. It is expected to have the road completed by October.

S. C., Anderson.—M. N. Patterson of Anderson has begun work on his contract for the construction of one and one-fifth miles of line for the North Anderson Street Railway Co. to be completed in 20 days. Is for real estate development and will be lengthened. J. D. Brown, J. D. Hammett, M. M. Mattierson as property develops. John W. Linley, son, J. H. Anderson and G. C. N. Bateman are interested.

Tenn., Chattanooga.—The Chattanooga Railway & Light Co. is operating cars over the line of the Chattanooga Traction Co. to the foot of Walden's Ridge. The schedule operated by the Chattanooga Railway & Light Co. is temporary and will later be

superseded by the Chattanooga Traction Co., which is to operate cars of its own when the line is completed to the top of Signal Mountain.

Tenn., Nashville.—Nashville Railway & Light Co. is reported expending more than \$125,000 this year for reconstruction and extensions. In addition to work already in progress the Buena Vista line will be extended one-half mile, the St. Cecilia line will be extended three blocks, and the Fetherland St. line will be extended to Shelby Ave. on 19th St.

Tex., El Paso.—The El Paso Electric Street Railway has been granted authority by the City Council to build three street-car lines.

Tex., El Paso.—The Rio Grande Traction Co. is reported to have been granted authority by the City Council to operate interurban cars on certain streets in the city.

Va., Lynchburg.—The Lynchburg Traction & Light Co., according to a report quoting H. L. Sauer, city engineer, will soon begin construction on the improvement of its line to Fairview Heights; also on a cross town line on Buchanan St. from 11th to 15th Sts. A little other work is also proposed.

W. Va., Charleston.—The Kanawha Valley Traction Co. has applied for street-railway franchise to build an electric line from Duffy St. along Washington St., Chesapeake Ave., also on Park Ave. from Central Ave. to Jackson St.

MACHINERY, PROPOSALS AND SUPPLIES WANTED

Manufacturers and others in need of machinery or supplies of any kind are requested to consult our advertising columns, and if they cannot find just what they wish, if they will send us particulars as to the kind of machinery or supplies needed we will make their wants known free of cost, and in this way secure the attention of manufacturers and dealers throughout the country. The Manufacturers Record has received during the week the following particulars as to machinery and supplies wanted.

"WANTS"

Air Compressors.—American Spar Co., Thos. H. B. Haase, manager, Wheeling, W. Va.—Prices on two steam-driven air compressors, capacity for one or two hammer drills.

Alcohol.—American Turpentine Manufacturing Co., J. P. House, superintendent, Asheville, N. C.—List of manufacturers of wood alcohol. (See "Turpentine Substitutes.")

Bank Fixtures, etc.—People's Bank of Grantsville, Grantsville, W. Va.—Prices on safe, vault and other bank fixtures.

Beltting, etc.—National Reflector Co., Clarksburg, W. Va.—Belts, pulleys, shafting, etc.

Blower or Fan.—National Reflector Co., Clarksburg, W. Va.—Positive pressure blower or fan.

Boiler.—Continental Coal Corporation, Pineville, Ky.—Boiler of 150 horse-power; second-hand if prompt shipment can be made from close shipping point.

Boiler.—Rogers Drug & Chemical Co., Russell Rogers, president, 502 N. Akard St., Dallas, Tex.—Prices on boiler.

Bridge Construction.—Dickenson County Court, Clintwood, Va.—Bids on September 2 for construction of bridge across Cranes Nest Creek, Dickenson county, 22 miles from Coalburn; one 70-foot and two 15-foot spans; concrete substructure; stone within 1½ miles; plans and specifications after August 15 at offices of Clerk of Circuit Court or E. R. Coker, both at Clintwood; P. St. J. Wilson, State Highway Commissioner, Richmond, Va.

Bridge Construction.—Office of Carl Lemmer (Mercer), County Auditor, Stanton, N. D.—Proposals until September 1, 2 and 3 for construction of two bridges across Knife River, of 120 and 90 feet span, and one bridge across Spring Creek, 40-foot span; steel, timber and concrete bridges.

Bridge Construction.—C. S. Turner, ordinary, Dade county, Trenton, Ga.—Bids until September 6 for construction of bridge across Lookout Creek near Sulphur Springs, Ga.; plans and specifications furnished by Converse Bridge Co., on file in office of ordinary, Trenton, Ga.

Bridge Construction.—Bids, addressed to W. G. Sneed, chairman Stafford County Commissioners, Stafford, Va., or C. F. Bailey, chairman Prince William County Commissioners, Dumfries, Va., until September 15 for construction of bridge across Chappawamsic Creek on Telegraph Rd. at Quantico,

Va.; plans and specifications on file at Courthouse at Stafford and Manassas, Va.

Bridge Construction.—Board of (Grady) County Commissioners, Chickasha, Okla.—Bids until August 22 at office of F. P. Bradley, County Clerk, for construction of three bridges; Nos. 1 and 2 across East Blitter Creek, each 60-foot steel span, with 70-foot approach; No. 5 across Spring Creek, 80-foot steel span, 20-foot approach.

Bridge Construction.—Taylor county, West Virginia.—Bids until August 30 at Courthouse, Grafton, to construct concrete arch bridge across Bartley Creek, on Philippi pike; bridge 20 feet long, 16-foot roadway, 6 feet in clear under arch to low water, and 8-foot wing walls; contractors to submit plans and specifications; at same time and place, receive bids for cleaning and painting bridge across Sandy Creek at Baby. I. J. Thomas, Clerk.

Building Materials.—J. C. Miller, Crocus, Ky.—Prices on construction iron, stone (Bowling Green) and plaster.

Building Materials, etc.—R. D. Baker, Hazard, Ky.—Prices on materials for three-story office and business building, including pressed brick, and glass and iron front for first floor; also heating apparatus.

Building Materials.—Neuman Bros., Kenedy, Tex.—Prices on metal tile shingles, metal ceiling, rolling partitions, art glass, etc.

Building Materials.—Chas. T. Boelhaue, Owl Bldg., 223½ Losoya, San Antonio, Tex.—Prices, with samples and catalogues, on building materials, etc., of interest to architects.

Building Materials, etc.—Southern Structural Steel Co., San Antonio, Tex.—Prices on brick, lime, sand, cement plaster, cement, gravel or crushed stone, reinforcing rods, electric wiring and steam-heating plant.

Building Materials.—O. C. Parker, Tallahassee, Fla.—Prices on 100 linear feet 9-inch 21-pound I-beam; 6 10-foot cast iron ½-inch metal columns, cap and base; 3 14-foot cast-iron 1-inch metal columns, cap and base; coal chute; 6 cast-iron ventilators for brick wall, 18x24-inch segment head; 6 1½-inch and 3 ¾-inch truss rods, 9½-inch nut, heavy washer both ends; rods and caps, shoes, etc., for 8 trusses, 50-foot span; 32 1½-inch 29-foot eye, one end upset, nut other end; 16 1½-inch 15½-foot eye, one end upset, nut other end; 8 cast top caps, heavy; 8 cast center pieces to connect wood struts and rods; 16 heavy cast shoes, rest on wall; 48 angle pieces to connect struts.

Cable, etc.—Proposals received at Bureau of Supplies and Accounts, Navy Department, Washington, D. C., until September 9 to furnish at Naval Academy, Annapolis, Md., quantity of naval supplies as follows: Schedule 5767, furnishing and installing oil-burning furnaces, etc.; schedule 5777, submarine cable, etc. Applications for proposals should designate schedules desired by number. Blank proposals furnished upon application to navy pay office, Baltimore, Md., or to bureau. T. J. Cowie, Paymaster-General, U. S. N.

Canners.—Evans-Hudson Company, Greenville, S. C.—To correspond with canners of corn, peas, tomatoes, beans, peaches, apples, pears, etc.; buys from 75 to 100-case lots.

Canning Machinery.—Southern Land & Investment Co., Fort Myers, Fla.—To correspond with canning machinery manufacturers.

Car.—Pennsylvania Equipment Co., West End Trust Bldg., Philadelphia, Pa.—Private car.

Chair Machinery.—See "Woodworking Machinery."

Channel Improvement (Reinforced Concrete, etc.)—Board of Public Works, Louisville, Ky.—Bids until August 28 for improvement of Beargrass Creek channel; plans and specifications on file; work will consist of construction of concrete channel and reinforced concrete retaining walls 9 to 24 feet high; may be bid upon as three separate contracts, with alternate bid for entire work; blank bonds, proposals, etc., obtainable from secretary of board; plans and specifications issued by first assistant engineer upon deposit of \$1. Approximate quantity of work as follows: Section E—Reinforced concrete 3000 cubic yards; plain concrete 1250 cubic yards; steel, 233,900 pounds; 15-inch vitrified pipe, 90 linear feet; 24-inch vitrified pipe, 20 linear feet; 4-inch drain pipe, 3910 linear feet; 6-inch underdrain, 735 linear feet; 10-inch underdrain, 365 linear feet; rock excavation, 2070 cubic yards; earth excavation, 29,425 cubic yards; piles, 2000 linear feet. Section F—Reinforced concrete, 4120 cubic yards; plain concrete, 935 cubic yards; steel, 426,000 pounds; 15-inch vitrified pipe, 45 linear feet; 18-inch vitrified pipe, 25 linear feet; 4-inch drain pipe, 2569 linear feet; 6-inch underdrain, 755 linear feet; 10-inch underdrain, 375 linear feet; rock excavation, 11,640 cubic yards; earth excavation, 21,530 cubic yards; piles, 5000 linear feet. Section G—Reinforced concrete 3550 cubic yards; plain concrete, 950 cubic yards; steel, 300,800 pounds; 15-inch vitrified pipe, 30 linear feet; 18-inch vitrified pipe, 45 linear feet; 4-inch drain pipe, 3060 linear feet; 6-inch underdrain, 750 linear feet; 10-inch underdrain, 370 linear feet; rock excavation, 11,600 cubic yards; earth excavation, 23,820 cubic yards; piles, 4000 linear feet; rip-rap, 900 square yards. Entire work—Reinforced concrete, 10,550 cubic yards; plain concrete, 3135 cubic yards; steel, 966,200 pounds; 15-inch vitrified pipe, 165 linear feet; 18-inch vitrified pipe, 70 linear feet; 24-inch vitrified pipe, 20 linear feet; 4-inch drain pipe, 9920 linear feet; 6-inch underdrain, 2240 linear feet; 10-inch underdrain, 1110 linear feet; rock excavation, 25,370 cubic yards; earth excavation, 74,775 cubic yards; piles, 11,000 linear feet; rip-rap, 900 square yards.

Ditch Construction.—Supervisors of Elsberry Drainage District, James C. Welch, secretary, Elsberry, Mo.—Bids until September 8 for construction of additional ditch and levee work aggregating 1,563,000 cubic yards; Harman Engineering Co. of Peoria, Ill., engineer.

Drainage Canal.—Browns Creek Drainage District, Miss., lets contract August 30 for five-mile canal; about 100,000 cubic yards; 12 feet bottom width. Address C. Lee Crum, attorney for commission, New Albany, Miss.

Drainage Ditch.—Richmond Cedar Works, Norfolk, Va.—Bids until September 1 for digging drainage ditch six miles long; approximate yardage 190,000; particulars from engineer, G. P. Lewis, 420 Law Bldg.

Dredging.—United States Engineer office, Wilmington, N. C.—Proposals for dredging in Cape Fear River, at and below Wilmington, until September 18. Information on application. H. W. Stickle, Major, Engineers.

Dredging Machinery.—W. W. Wright, Orlando, Fla.—Prices on following: Pump, 8 or 10-inch discharge, for dredging sand or mud from river to fill low lands; piledriver; power to operate both; gasoline engine preferred.

Dryer.—Pringle Turpentine Cup Co., Biloxi, Miss.—Rotary dryer for plastic clay of

above and four miles below Waverly, Mo., received until September 11. Information on application. Herbert Deakyn, Major, Engineers.

Electrical Machinery.—C. W. Petty, Randleman, N. C.—A 2200-volt three-phase revolving field generator and 50-horse-power Corliss engine.

Electrical Machinery, etc.—F. C. Boggs, Major, General Purchasing Officer, Isthmian Canal Commission, Washington, D. C.—Bids until September 10 for furnishing transformers, switchboard, wires and cable, conduits, panel boards and miscellaneous electrical apparatus. Blanks and general information relating to this circular (No. 789) may be obtained from this office or offices of assistant purchasing agents, 24 State St., New York; 614 Whitney-Central Bldg., New Orleans; and 1066 North Point St., San Francisco; also from U. S. Engineer offices in Seattle, Los Angeles, Baltimore, Philadelphia, Pittsburgh, Boston, Buffalo, Cleveland, Cincinnati, Chicago, St. Louis, Detroit, Milwaukee, St. Paul, Chattanooga, Louisville, Mobile and Galveston; Commercial Club, Kansas City, Mo.; Chamber of Commerce, Quincy, Ill., and Commercial Club, Tacoma, Wash.

Elevator.—C. H. Dozier, Marion, Ala.—Prices on one-story hand elevator; water or electric power.

Elevator.—F. A. Randall, Haines City, Fla.—Prices on platform elevator for heavy lifting.

Engine.—City of Tallapoosa, Ga., C. E. Pearce, Mayor.—60-kilowatt direct-connected engine.

Heating Plant.—C. B. Hunt, Box 432, Marlann, Ark.—Prices on heating plant for \$3000 theater.

Heating Plant.—Commissioners of State Institutions, Governor's office, Tallahassee, Fla.—Bids until August 28 on installation of steam-heating and hot-water system for Receiving Hospital for Florida Hospital for Insane, Chattahoochee, Fla.; certified check \$500; successful bidder required to bond for \$1000 as a guarantee that plant is satisfactorily installed and works properly; plans and specifications obtainable from Bishop & Greer, architects, Valdosta, Ga., upon deposit of \$10.

Heating Plant.—Southern Structural Steel Co., San Antonio, Tex.—Prices on steam-heating plant. (See "Building Materials.")

House Furnishing, etc.—Mrs. Frank Cassidy, Stuart, Fla.—Prices on furniture, dishes, rugs, curtains, large floor caskets, oil stoves, ice boxes, electric fixtures and gasoline engines.

Hoisting Machinery.—Haymes Bros., Chatham, Va.—Prices on hoisting outfit.

Ice Machinery.—W. C. McDonald, Burnett, Tex.—Prices on five-ton ice plant.

Ice Machinery.—Southern Land & Investment Co., Fort Myers, Fla.—To correspond with ice machinery manufacturers.

Ice Machinery.—Layne & Bowler Company, Stuttgart, Ark.—Catalogues and prices on cooling systems for moving-picture shows; to wash and cool air entering building.

Ice Machinery.—Chapley Light & Power Co., Chipley, Fla.—Prices on equipment for 10-ton ice plant.

Ice Plants.—T. B. Carrick, High Point, N. C.—Addresses of manufacturers of ice-plant equipment.

Inclinator.—Mrs. Milton Humes, Huntsville, Ala.—Addresses of firms relative to installing inclinator for burning and destroying sewage disposal.

Levee.—Levee Board, T. G. Dabney, engineer, Clarksdale, Miss.—Bids until August 19 for following levee enlargement work: Sections 1 to 7, inclusive (on Horn Lake), containing 645,000 cubic yards; sections 8, 70, 71 (Frier Point), 375,000 cubic yards; section 12H (Forest Home), 125,000 cubic yards; Hushpuckana Crossing, on section 14H, 52,000 cubic yards; amounts approximate.

Levee Construction.—Board of State Engineers, 213 New Orleans Court Bldg., New Orleans, La.—Proposals until August 29 to construct following on Mississippi River, right bank: Reid-Biggs levee, Madison parish, enlargement, about 400,000 cubic yards; Bayou Roundaway levee, Madison and Tensas parishes, about 50,000 cubic yards; information on application to Board of State Engineers, or to O. W. Campbell, secretary Board of Commissioners, Fifth Louisiana Levee District; E. C. Rhodes, president.

Levee Construction.—Mississippi Levee Commissioners, Greenville, Miss.—Bids until September 8 for construction of about 45,000 cubic yards of sub-levees (within 1½ miles) and 70,000 cubic yards levee enlargement (within 1 mile); W. L. Thompson, chief engineer.

Locomotive.—Sabel Bros., Jacksonville, Fla.—Light locomotive; five to six tons.

Manufactured Products.—Adolf Rosenfeld, 1 Wallfischgasse 4, Vienna, Austria.—Correspondence (view to agency) with manufacturers of household and kitchen novelties, suspender, garter and sock-holder novelties, and novelties for technical trade in any line, including hand tools. Send samples and prices.

Mechanical Equipment.—Treasury Department, office of supervising architect, Washington, D. C.—Proposals received until September 26 for mechanical equipment (except elevators and lighting fixtures) of United States postoffice and courthouse at Muskogee, Okla.; drawings and specifications obtainable at office of superintendent of construction, Muskogee, or at this office, at discretion of O. Wenderoth, supervising architect.

Metal Laths.—Thomas S. Brown, Newcomb Bldg., Bristol, Tenn.—Prices on metal laths.

Naval Supplies.—Bureau of Supplies and Accounts, Navy Department, Washington, D. C.—Proposals until September 2 to furnish at Naval Academy, Annapolis, Md., following: Schedule 5731, placing crossot steel whaling in Reina Mercedes dock; schedule 5732, waterproofing paint, ferro-inclave, sand, gravel, roofing paper, steep roof pitch; schedule 5709, structural rivets and bolts; "Hy-rib" steel, "Hy-rib" punch and cutter, steel sash; schedule 5761, steel plate, channels, angles, bars, I-beams, roof truss. Forms

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Drykilns.—Barbour Buggy Co., South Boston, Va.—To correspond with manufacturers of and contractor for drykilns.

Electric Meters.—Chipley Light & Power Co., E. H. Hale, engineer, Chipley, Fla.—Prices on meters; 5 and 10 ampere, three phase, 60 cycles, 110 volts.

Electric Fixtures.—Mrs. Frank Cassidy, Stuart, Fla.—Prices on electric fixtures. (See "House Furnishings.")

Electric-light Plants.—Modern Equipment Co., 201 Bay St. East, Savannah, Ga.—Names and addresses of companies making specialty of installing lighting and water plants in the South.

Electric Machinery.—F. J. Patterson, City Clerk, Newbern, N. C.—Bids until August 23 on following: Centrifugal pump having capacity 750 to 1000 gallons per minute at 875 R. P. M. against water pressure of about 65 pounds per square inch and arranged to be driven by direct connection to 75-horse-power electric motor now on hand; 50-light 2200-volt primary, 6.6 amperes, series arc rectifier outfit.

Electrical Machinery.—W. C. McDonald, Burnett, Tex.—Prices on 1000-light dynamo for purpose of lighting town.

Electrical Machinery.—Clay Light & Ice Co., Clay, Ky.—One 30-kilowatt alternating-current generator, single phase, 60 cycle, 2200 volts, revolving field, belt driven, complete with exciter, switchboard, etc.; second-hand guaranteed will answer purpose.

Engine, etc.—C. W. Petty, Randleman, N. C.—A 50-horse-power Corliss engine and 2200-volt three-phase revolving field generator to match.

Engines.—See "House Furnishings, etc.," Stuart, Fla.

Engines.—Siler City Light & Telephone Co., Siler City, N. C.—Catalogues and prices from manufacturers of 50, 75 and 100-horse-power oil engines.

Envelope Machinery.—Simmes Company, 19 Spruce St., New York.—Names of manufacturers of envelope machinery.

Fertilizer Machinery.—Pinehurst Fertilizer Co., M. C. Peavy, Pinehurst, Ga.—Prices on machinery for dry mixing fertilizer plant.

Flood Gates.—See "Water-wheels, etc."

Furniture.—Sisters of St. Joseph, Sister Mary Francis, 1324 Monte Sano Ave., Augusta, Ga.—Information and prices on school furniture, house furniture, etc.

Gas Franchise.—G. L. Rilling, Mayor, Lake Charles, La.—Bids September 11 for granting gas franchise.

Gates.—Dr. F. S. Whitney, Elkton, Fla.—Addresses of manufacturers of automatic gates for stock farm; gates operated by hand lever or by trip on which horse stands.

Glass Bottles.—E. O. Painter Fertilizer Co., Jacksonville, Fla.—Several thousand full quart glass bottles for syrup.

Heating Plants.—See "Building Materials, etc."

furnished on application to navy pay office, Baltimore, Md., or to bureau.

To furnish at Navy-yard, Washington, D. C., following: Schedule 5718, fire-brick; schedule 5746, automobile ambulance; schedule 5747, hot-rolled or forged steel; schedule 5748, window and door frames, doors, etc., dressed sheathing; schedule 5749, machine-made brick, Trinidad asphalt, roofing slate, reinforcing wire for concrete; schedule 5750, switchboards; schedule 5756, medium steel angles. Forms furnished on application to bureau.

To furnish at Navy-yard, Norfolk, Va., following: Schedule 5718, fire-brick for oil-burning furnaces, forges, etc.; schedule 5754, liquid ammonia. Forms furnished on application to navy pay office, Norfolk, Va., or to bureau. Applications for proposal forms to designate schedules by number.

Oil-extracting Machinery.—Graves-Spears Road Machinery Co., 1041 Monadnock Bldg., San Francisco, Cal.—Correspondence with manufacturers relative to machine used in Brazil for crushing coquina nuts and extracting oil from them.

Unloading Machinery.—See "Conveying Machinery."

Paving.—Board of Bond Trustees, Lake City, Fla.—Opens bids September 8 for about 3500 square yards cement sidewalks.

Paving, etc.—John W. Foster, Commissioner of Streets, Sewers and Public Improvements, Waco, Tex.—Bids until August 22 for furnishing all material and labor for construction of 15,000 square yards paving, 6000 linear feet of two-foot gutter and 1500 linear feet new curb; will require about 1500 linear feet excavation; G. E. Byers, City Engineer.

Paving, etc.—Board of Mississippi Levee Commissioners, Greenville, Miss.—Bids until September 8 for furnishing material and placing about 17,500 square feet four-inch plain concrete pavement, 370 linear feet eight-inch curb wall three feet deep and 190 linear feet eight-inch curb wall five feet deep; W. L. Thompson, chief engineer.

Paving.—Board of Bond Trustees, Lake City, Fla.—Bids September 8 for construction of 3500 square yards cement sidewalks.

Paving.—Office Commissioners for Opening Streets, Annex Improvement Commission, Baltimore, Md.—Proposals addressed to Board of Awards, care of City Register, City Hall, until August 27 to grade, curb and pave following streets with bituminous concrete under contract No. 126.—Ellamont St., North Ave. to Baker St.; Rosedale St., North Ave. to Baker St.; Braddish Ave., North Ave. to Baker St.; Whitmore Ave., North Ave. to Westwood Ave.; Smallwood St., Westwood Ave. to Presbury St.; Presbury St., Ellamont St. to Windsor Mill Rd.; Presbury St., Smallwood St. to Warwick Ave.; Westwood Ave., Smallwood St. to Warwick Ave.; total, 22,800 square yards. Specifications can be obtained at office Commissioners for Opening Streets, City Hall, where plans and profiles are on file; deposit of \$5 required for each set of specifications covering contract; John L. Sanford, acting president Commissioners for Opening Streets.

Paving.—Marshall County Supervisors, C. H. Wright, Clerk, Holly Springs, Miss.—Bids until September 2 to lay 2200 feet concrete paving around courthouse.

Piledriver.—See "Dredging Machinery."

Pipe-laying.—The Dingle Company, 7 S. Liberty St., Cumberland, Md.—Bids for laying 1650 feet four-inch water pipe and 500 feet sewer pipe.

Piping.—Adrian H. Eldredge, 514 Pleasant St., Monongahela City, Pa.—To correspond with manufacturers of piping for irrigation systems.

Pulleys and Shafting.—See "Belting, etc."

Pumps.—See "Electric Machinery."

Rails.—B. E. Moses, Lynchburg, O.—To lease (for two or three years) four miles of 35 or 40-pound relaying rails for Washington, Indiana.

Rails.—Sabel Bros., Jacksonville, Fla.—Three miles 12-pound new or relaying rails.

Road Construction.—Road District No. 3, Pearland, Tex.—Bids until August 26 for construction of shell roads. Address A. W. York, secretary Road Commissioners.

Road Construction.—Court of Jackson County Commissioners, at Bass, near Stevenson, Ala.—Bids until September 16 for grading, draining and macadamizing part of Crow Creek road; expenditure \$8000; W. S. Keller, State Highway Engineer, Montgomery, Ala.

Road Construction.—Webb County Commissioners, Laredo, Tex.—Bids until August 27 for grading and construction of 34.8

miles of road known as Laredo-San Antonio Highway, construction of culverts and bridges, surfacing with gravel about seven miles of road, etc.; plans and specifications at office of E. J. Foster, County Surveyor; J. A. Rodriguez, County Clerk.

Road Construction.—Somerset County Commissioners, Robert F. Maddox, Clerk, Princess Anne, Md.—Bids until September 2 for construction of two miles of State-aid highway upon or along Princess Anne-Deals Island Rd. between corporation limits of Princess Anne and Deals Island; bids to be made on blank forms obtainable from State Roads Commission, 534 N. Howard St., Baltimore, Md.; plans can be seen and terms or specifications and contract obtained from State Roads Commission.

Road Construction.—Commissioners of Queen Anne's County, E. John Merrick, clerk, Centerville, Md.—Bids until September 2 for building section of State-aid highway between Queenstown and Winchester, 1.7 miles; between Queenstown and Centerville, .7 mile; between Centerville and Rutlisburg, 1 mile; F. E. Schneppe, Roads Engineer; plans and specifications and blank forms of proposals obtainable at office of State Roads Commission, Garrett Bldg., Baltimore, Md.

Road Construction.—Ohio County Commissioners, George W. Oldham, Clerk, Wheeling, W. Va.—Bids until August 28 to place bituminous macadam on Loung Run Rd., about two miles; until August 28 to pave portions of certain road with brick; until August 29 to macadamize certain roads.

Roofing.—Stanton Foundry & Machine Co., Palatka, Fla.—No. 28 gauge galvanized best iron roofing.

Safe, etc.—Valle Cruces Bank, Valle Cruces, N. C.—Prices on safe, vault and bank fixtures.

Sand Blast.—Chas. T. Boelhaewe, Owl Bldg., 223½ Losoya, San Antonio, Tex.—Addresses of manufacturers of sand blast.

Scales, etc.—National Reflector Co., Clarksburg, W. Va.—Scales and handlers.

Sewers.—Board of Awards, at office of City Register, City Hall, Baltimore, Md.—Proposals until September 3 for building storm-water drains under Contract 30 and constructing lateral sewers and house connections in Districts No. 21-A and 22-A, per plans on file in office of Calvin W. Hendrick, chief engineer of the Sewerage Commission, American Bldg. Specifications and plans obtainable upon application at office of secretary of Commission, Room 904 American Bldg., on and after August 16; charge of \$10 for each set of specifications and blueprints, refunded upon return on or before September 3 of unused specifications; certified check with each bid as follows: Storm-water contract No. 30, \$4500; sanitary contract No. 118, \$2000. Approximate quantities (S. W. No. 30): 45 linear feet 120-inch by 87-inch masonry drain; 1870 linear feet 120-inch by 75-inch masonry drain; 870 linear feet 90-inch masonry drain; 1660 linear feet 60-inch masonry drain; 685 linear feet 90-inch by 51-inch masonry drain; 605 linear feet 48-inch masonry drain; 1150 linear feet 8-inch to 24-inch terra-cotta pipe drains and sewers; 11 manholes. Approximate quantities (sanitary contract No. 118): 13,500 linear feet vitrified-pipe house connections; 13,000 linear feet vitrified-pipe sewer 8 to 15 inches in diameter. Charles England, chairman Sewerage Commission.

Sewer Construction.—See "Water-works and Sewer Construction." Bloomsbury, N. C.

Sewer Construction.—Executive Board, Charlotte, N. C., A. H. Wearn, City Clerk and Treasurer.—Bids until August 27 for construction of about \$400 feet 8-inch sewer, with manholes and flush tanks; plans and proposals at office of Joseph Firth, City Engineer.

Sheet Iron.—Metal Tobacco Hogshead Co., C. W. Byrd, secretary, Durlam, N. C.—From time to time, quantity of sheet iron for manufacture of metal tobacco hogsheads.

Shuttle Machinery.—Alabama Automatic Shuttle Manufacturing Co., H. M. Johnson, secretary-treasurer, Gadsden, Ala.—Prices on shuttle machinery.

Steam Shovel.—American Stone Co., Floyds Knobs, Ind.—Receiving bids on steam shovel for operation at Butterfield, Ark.

Steel Forms.—Adrian H. Eldredge, 514 Pleasant St., Monongahela City, Pa.—To correspond with manufacturers of steel ensilage silo concrete forms.

Steel Plates, etc.—Bureau of Supplies and accounts, Navy Department, Washington, D. C.—Bids until September 2 to furnish at Navy-yard, Charleston, S. C., steel plates, shapes, angles and channel bars. Ap-

plications for proposal forms should refer to schedule 5757. Forms furnished on application to navy pay office, Charleston, or to bureau.

Telephone Materials.—Lake Region Telephone Co., Winter Haven, Fla.—Prices on wire, poles and telephones; also cross-arms, etc.

Tools.—See "Manufactured Products." Vienna, Austria.

Turpentine Substitutes.—American Turpentine Manufacturing Co., J. P. House, superintendent, Asheville, N. C.—List of manufacturers of turpentine substitutes; also wood alcohol. Manufacturers having comparatively short freight haul to Asheville preferred.)

Vending Machine Manufacturers.—Gaston & Hamilton, Chester, S. C.—Correspondence with manufacturers relative to manufacturing patented slot machine for vending chestnuts, candies, etc.

Water-wheels, etc.—Adrian H. Eldredge, 514 Pleasant St., Monongahela City, Pa.—To correspond with manufacturers of turbine water-wheels and iron head gates or water flood gates for dams.

Water-works.—E. H. Powell, City Secretary, Clarendon, Tex.—Bids August 25 for extension to water-works; daily capacity 100,000 gallons; construct reservoir of 50,000 gallons capacity; James Trent of Clarendon, engineer in charge.

Water-works.—W. J. Griffin, Mayor pro tem., Manteo, N. C.—Bids until September 1 for construction of artesian well.

Water-works and Sewer Construction.—Jas. H. Peun, 210 Tucker Bldg., Raleigh, N. C.—Bids until September 15 for construction of about 15,000 feet water pipe lines and 10,000 feet sewer in Bloomsbury, near Raleigh.

Water-works.—Morris Fertilizer Co., Third National Bank Bldg., Atlanta, Ga.—Estimates on drilling artesian well and air lift system to raise water.

Water-works.—Modern Equipment Co., 201 Bay St. East, Savannah, Ga.—Names and addresses of companies making specialty of installing water and lighting plants in South.

Water-works Materials.—W. F. Divine, City Clerk, St. Petersburg, Fla.—Proposals until September 2 for following: Two tons pig lead; 650 feet 12-inch standard cast-iron water pipe; three 12-inch gate valves; 2500 pounds special castings, and fittings; 150 horse-power 180 pounds pressure horizontal return tubular boiler, with full front steel setting; 60-foot smokestack; 80,000-gallon tank, with 80-foot tower, erected; f. o. b. St. Petersburg.

Water-works Materials.—City Council, Scottsboro, Ala.—Proposals until August 28 for following f. o. b. cars Scottsboro: 3350 feet cast-iron pipe; 1560 feet cast-iron pipe; 13,200 feet cast-iron pipe; all class "B"; 3 tons specials; 13 standard double nozzle hydrants; 5/8-inch, four 6-inch and one 4-inch H. I. gate valves and boxes; 14,000 pounds pig lead; 550 pounds jute; 17,660 feet 1 1/2-inch galvanized pipe; 3300 feet 2-inch galvanized pipe; 350 galvanized fittings; 16 1 1/2-inch screw gate valves and boxes, 18 inch cover; 17,862 pounds 1/2-inch and 3/4-inch steel bars; 209 barrels Portland cement; 75 yards sand; 135 yards stone or gravel; 10,000 feet form lumber; specifications furnished by W. C. Maples, City Clerk, or by J. B. McCrary Company, engineer, 1908 Third National Bank Bldg., Atlanta, Ga.

Well-drilling.—See "Water works."

Window Sash.—Stanton Foundry & Machine Co., Palatka, Fla.—Window sash for wooden structure.

Woodworking Machinery.—See "Shuttle Machinery."

Woodworking Machinery.—United Supply Co., High Point, N. C.—Prices on 30-inch planer; 8-inch molder; 30-inch endless bed sander; combination saw; chair tenoning machine; routing machine for cane seats.

Wooden Pipe.—Palatka Gas Light & Fuel Co., Palatka, Fla.—Addresses of dealers in wooden pipe.

Woodworking Machinery.—Geo. Vinson Shingle & Manufacturing Co., Berwick, La.—Names of manufacturers of crate, box and veneer machinery.

Peat Production Small.

While the United States is the richest country in the world in the deposits of peat, little active work is done in mining or digging it, and so far as is known very few of the peat-fuel plants established have gone beyond the experimental stage,

and many of them have never been equipped with essential machinery. Reports from all known peat-fuel plants in the United States, according to an advance chapter from "Mineral Resources, 1912," on the production of peat in 1912, by Charles A. Davis, show that with one exception they were idle during the summer of 1912. The only plant reporting production made air-dried cylindrical peat blocks, which, when thoroughly dry, were about six inches long and two inches in diameter, dense and hard, and stood handling well. The output of peat fuel was reported as about 1300 tons, valued at \$4550. All this peat was sold.

The production of peat for fertilizer in 1912, so far as reported, was 41,080 short tons, of which about 8000 tons was reported as sold air-dried—that is, not dried by artificial heat. The value of this material at the selling prices reported was \$186,522.

The amount sold for mixing with prepared stock foods was reported to be 3000 short tons, at an average price of about \$6 a ton. An increased production of paper stock from peat fiber over that of 1911 was reported by the only company producing this material. The output for 1912 was reported to be about 2000 short tons. The production of peat moss stable litter in the United States in 1912, so far as could be learned, was suspended. As in past years, peat moss was imported from Holland, the imports last year being 9053 short tons, valued at \$39,867, almost exactly the same as in 1911. This material is used almost exclusively as bedding for horses in stables in the thickly populated parts of large cities. It is especially adapted to this purpose on account of its absorbent and deodorizing properties.

A copy of the report on peat may be obtained free on application to the Director, United States Geological Survey, Washington, D. C.

TWO VETERANS CANED.

An Interesting Incident of Developmental Work for the South.

Some years ago, while Capt. J. F. Merry of Manchester, Iowa, was connected with the passenger department of the Illinois Central Railroad Co. and in charge of that company's immigration from States north of the Ohio River to points in Kentucky, Tennessee, Mississippi and Louisiana, he organized a farmers' convention to be held at Jackson, Miss. In arranging his program he was careful to have an equal number of speakers from the North and the South, and only agriculturists, horticulturists, dairy-men and stockmen of note were even invited to participate in discussing such topics as the captain thought would be of real practical value to the planters and farmers of Mississippi.

Among the distinguished speakers from the North was Mr. W. D. Hoard, Fort Atkinson, Wis., editor of *Hoard's Dairyman*, a publication known among the dairymen of this and all other dairy countries. When the convention was called to order in the House Chamber of the old Capitol building Mr. Hoard was elected chairman. Those who have attended conventions over which Mr. Hoard presided will smile when they read this, for they will understand that as a presiding officer W. D. Hoard has no equal. He is tall, lank and lean, of the Abraham Lincoln type, and has such a fund of choice stories that no contingency can possibly arise in a convention over which he is presiding that he cannot instantly relate a "reminder" that fits the case as if made for it. During the afternoon session of the last day of the convention Captain

Merry was called out by a committee of Jackson business men, invited into an adjacent office and the committee proceeded to explain to him how greatly the people of Mississippi, and especially the citizens of Jackson, were indebted to him for bringing such a convention to Jackson, and they felt under special obligations to him for securing such an eminent dairyman to discuss "Dairying in Mississippi" as Colonel Hoard, and how they not only had enjoyed his addresses, but his rulings as chairman had been so fair and his manners so genial that all Jackson had fallen in love with him. Therefore, its citizens could not let him leave the city without carrying to his Northern home some token of their appreciation of him and some constant reminder of the Jackson convention.

"We have," they said, "with this in mind purchased a gold-headed cane, and at the evening session we want you to present it to Mr. Hoard with compliments of the citizens of Jackson."

Captain Merry demurred, stating that the gift was in every way worthy of the citizens of Jackson, and that he felt sure Mr. Hoard would appreciate it. But for him to present it would be entirely out of place. The committee tried to maintain their position by stating to the captain that he was personally acquainted with Mr. Hoard, knew all about him and what was best to say in the presentation of the cane. The captain, however, was not convinced, and in the most earnest manner insisted that for an Iowa man to present a testimonial to Mr. Hoard in behalf of the citizens of Jackson was simply ridiculous. Then the committee was apparently getting warm under the collar, and Captain Merry finally said:

"Gentlemen, if there is going to be any feeling about this I can give Mr. Hoard the cane, but it is a most unusual request."

The committee was greatly pleased and profuse in their thanks to Captain Merry for this helping them out of an embarrassing situation. It was then and there agreed that at a stated time they would have the cane in the ante-room ready for the captain.

Before the meeting was called to order the captain had the cane and seated himself in the audience where he could see the chairman, and after the usual opening exercises he got the floor and proceeded to make the presentation. Mr. Hoard was a Federal soldier of the Civil War, and during the siege of Vicksburg his regiment was for a time camped at Jackson. The captain made use of that by calling Hoard's attention to the gray-haired men and women of his audience who had not forgotten when he came among them as an enemy bearing a loaded rifle and bitterness in his heart toward the South. "But," said the captain, "you have brought to these people on this occasion the gospel of pure milk and so expiated on the glories of the brindle cow that they forgive all the past and have commissioned me to present to you, in behalf of the citizens of Jackson, this beautiful gold-headed cane."

Amid great applause Captain Merry took his seat, feeling he had done the best he could in the awkward position in which the committee had placed him. When the cheering had subsided Chairman Hoard, with a face as "long as the moral law and the ten commandments," arose, and, towering above his audience, began:

"Captain Merry and citizens of Jackson, I am profoundly moved by this expression of your forgiveness and esteem. In my declining years I shall lean upon this cane, feeling that I am supported by my Confederate friends of Jackson, Miss."

Then reaching down he took from under the desk another gold-headed cane, and, turning to Captain Merry, said:

"I would have you understand, Sir, that this is not altogether a one-sided affair."

The audience caught on, and for several minutes Colonel Hoard stood with a bland smile of satisfaction upon his face, and then in his inimitable way presented Captain Merry in behalf of the citizens of Jackson a gold-headed cane exactly like his own. The incident will never be forgotten by those in attendance at the last session of the farmers' convention. The convention was the means of introducing methods that when applied by some of the farmers in that locality had to do with the ushering in of new farming conditions that has made that section of the South akin to that of Wisconsin and Iowa, the homes of ex-Governor Hoard and Captain Merry.

The First National Bank of Statesville, N. C., Joseph C. Irvin, president, and E. S. Pegram, cashier, is circulating a booklet telling of the attractions of the town and the opportunities of the vicinity for agriculture.

FINANCIAL NEWS

The MANUFACTURERS RECORD invites information about Southern financial matters, items of news about new institutions, dividends declared, securities to be issued, openings for new banks, and general discussions of financial subjects bearing upon Southern matters.

Review of the Baltimore Market.

Office MANUFACTURERS RECORD,

Baltimore, Md., August 20.

The Baltimore stock market was dull during the past week. In the trading United Railways common sold from 27 to 27½; do. income bonds, 62½ to 62¾; do. funding 5s from 86 to 86½ for the larger denominations and 88 for the small; do. notes 5s, 109; do. 4s, 83 to 83½; Consolidated Gas, Electric Light & Power common, 106½ to 110, with last sale at 108; do. preferred, 110 to 113½; do. 4½s, 87¼ to 87; Consolidated Gas 5s, 104; do. 4½s, 92½ to 92; Seaboard Air Line common, 20½ to 19½; do. preferred, 46¼ to 45½; Seaboard 4s, stamped, 83½; do. adjustment 5s, 74¼ to 74½; Mt. Vernon-Woodberry Cotton Duck 5s, 68¾ to 68; G. B. S. Brewing common, 3; do. income bonds, 7½; do. 4s, 41 to 43.

Bank stocks sold thus: Merchants-Mechanics, 33; Farmers and Merchants, 47½; Old Town, 14; Exchange, 100. Fidelity & Deposit sold from 155 to 160, with last sale at 159; Mercantile Trust, 165; Continental Trust, 200; Maryland Casualty, 95.

Other securities were traded in as follows: Baltimore City 4s, 1951, 92½; Houston Oil common, trust certificates, 17¼ to 17; do. preferred do., 57½; Pennsylvania Water & Power common, 68 to 71½; Baltimore Electric preferred, 43 to 43½; Consolidation Coal convertible 6s, 99 to 99½; Maryland Electric 5s, 96½ to 96¾; Atlantic Coast Line of Connecticut, 240; Milwaukee refunding 4½s, 90½; Baltimore Brick preferred, 23½; Detroit United 4½s, 69 to 68¾; Norfolk & Portsmouth Traction 5s, 87½ to 88; Wilmington & Weldon 5s, 103¼; Carolina Power & Light 5s, 91; Chicago Railways 5s, 98¼; Baltimore City 4s, 1961, 92½; Fairmont & Clarksburg Traction 5s, 99 to 99½; New Orleans, Mobile & Chicago 5s, 50½ to 50; Consolidation Coal, 95 to 94¼; Alabama Company

common, 7¼; Anacostia & Potomac 5s, 98¼; Maryland & Pennsylvania common, 30; Charleston City Railway 5s, 101; Georgia, Carolina & Northern 5s, 102½; Georgia, Southern & Florida 5s, 102; Baltimore, Sparrows Point & Chesapeake 4½s, 94¼; Atlantic Coast Line convertible debenture 4s, 93½; Cigar Machine Corporation of America, 1½; Baltimore City 4s, 1955, 92½; do. do. 1954, 92½; Macon Railway & Light 5s, 96½; Northern Central Railway stock, 116; Atlantic Coast Line Railroad 4s, certificates, 80; Baltimore City 3½s, 1928, 90; do. do. 1920, 89¼.

SECURITIES AT BALTIMORE.

Last Quotations for the Week Ended August 20, 1913.

Railroad Stocks.	Par.	Bid.	Asked.
Atlantic Coast Line.....	100	121	...
At. Coast of Conn. 4s.....	100	237½	241
Ga. Sou. & Fla. 3d Pfd.....	100	...	81
Maryland & Penna.....	100	29	40
Seaboard Air Line Com.....	100	19½	20½
Seaboard Air Line Pfd.....	100	45½	46½
United Ry. & Elec. Co.....	50	27	27½
Western Maryland.....	100	41	...
Bank Stocks.			
Bank of Baltimore.....	100	175	183
Bank of Commerce.....	15	30¼	32
Brokers & Merchants.....	100	229	240
Farmers & Merchants.....	40	46	48
German American.....	100	108	...
Merchants Mechanics.....	10	...	23
Trust, Fidelity and Casualty Stocks.			
Baltimore Trust.....	100	...	165
Fidelity & Deposit.....	100	200	210
Fidelity & Deposit.....	50	150	160
Maryland Casualty.....	25	...	98
Merc. Trust & Dep.....	50	165	...
Union Trust.....	50	60	...
U. S. Fidelity & Guar.....	100	192	198
Miscellaneous Stocks.			
Baltimore Brick.....	100	...	3
Baltimore Electric Pfd 5s.....	50	43½	44
Canton Company.....	100	...	170
Con. Gas, Elec. Lt. & P. Com.....	100	109	110½
Con. Gas, Elec. Lt. & P. Pfd.....	100	110	...
Consolidation Coal.....	100	94½	97½
G. B. S. Brewing Co.....	100	2½	3
Mer. & Min. Trans. Co. V. T.....	100	47	60

Railroad Bonds.			
Alabama Midland 5s.....	102	103½	...
Atlantic Coast 1st 4s.....	100	80½	...
At. Coast Conv. Deben. 4s.....	93	96	...
At. Coast Conv. 4s, Cfs., 5-20s.....	87	90	...
At. Coast Conv. 4s, Cfs.....	80	...	...
Florida Cent. & Penin. 5s.....	101½	...	...
Coal & Coke Railway 5s.....	95	...	...
Georgia & Alabama 5s.....	102½	...	...
Ga. Carr. & North. 1st 5s.....	102½	102½	...
Maryland & Penna. 5s.....	56	61	...
New Orleans Gr. Nor. 5s.....	62½	66	...
New Orleans, M. & C. 5s.....	50	50½	...
Potomac Valley 1st 5s.....	101½	102	...
Sav. Fla. & West. 5s.....	103½	104	...
Seaboard Air Line 4s.....	82½	83½	...
Seaboard 4s, Stamped.....	84	85	...
Seaboard Adjustment 5s.....	74½	75	...
South Bound 5s.....	102½	103	...
Wash., Balto. & Annap. 5s.....	83	...	...
Wilmington & Weldon 5s.....	103	105	...

Street Railway Bonds.			
Anacostia & Potomac 5s.....	98½	99½	...
Angusta Ry. & Elec. 5s.....	99	100	...
Balto. Sp. Tr. & C. 4½s.....	94½	95	...
Balto. Traction (N. B.) 5s.....	102½	104½	...
Central Railway (Bto.) 5s.....	100½	101½	...
Charleston City Railway 5s.....	100½	101	...
Charleston Con. Electric 5s.....	92½	93½	...
City & Suburban 5s (Balto.).....	102	...	...
Columbia Street Railway 5s.....	91½	92½	...
Danville Traction 5s.....	83	...	...
Fairmont & Clarksburg Trac. 5s.....	99	99½	...
Knoxville Traction 5s.....	100½	102½	...
Macon Railway & Light 5s.....	96½	97½	...
Maryland Electric Railways 5s.....	96½	97	...
Monongahela Val. Trac. 5s.....	91½	92½	...
Nashville Street Railway 5s.....	102	...	...
Newport News & Old Point 5s.....	97	...	...
Norfolk Street Railway 5s.....	102	103½	...
Norfolk & Atlantic Term. 5s.....	93	95	...
Norfolk & Portsmouth Trac. 5s.....	88½	...	...
United Railways 1st 4s.....	83	83½	...
United Railways Income 4s.....	62½	63	...
United Railways Funding 5s.....	85½	86½	...
United Railways Notes 5s.....	108	109	...
Virginia Railway & Power 5s.....	92	93	...

Miscellaneous Bonds.			
Arundel Sand & G. 6s.....	97	99	...
Ala. Con. Coal & Iron 5s.....	70	73	...
Baltimore Electric 5s, Stp.....	98	...	...
Consolidated Gas 5s.....	103½	104	...
Consolidated Gas 4½s.....	91	91½	...
Con. Gas, Elec. Lt. & P. 4½s.....	87	87½	...
Consolidation Coal 6s.....	99½	99½	...
Consolidation Coal Refd. 5s.....	86½	87½	...
Davidson Chemical 5s.....	98	...	...
Fairmont Coal 1st 5s.....	80½	84½	...
G. B. S. Brewing 1st 4s.....	42½	...	...
G. B. S. Brewing Inc. 5s.....	7½	8	...
Mt. Vernon-Woodby's Col. Duck 5s.....	67½	68½	...

Bank Reports.

The First National Bank of Birmingham, Ala., reports August 9, 1913, loans and discounts, \$9,091,404; United States bonds (par), \$1,350,000; total cash, \$2,481,896; capital stock, \$1,500,000; surplus and profits, \$1,677,263; circulation, \$1,250,000; total deposits, \$9,805,134; total resources, \$14,232,397. W. P. G.

Harding is president; J. H. Woodward and J. H. Barr, vice-presidents; Thomas Hopkins, cashier; F. S. Foster, Thomas Bowron and J. K. Fleming, assistant cashiers; J. E. Osburn, secretary savings department; J. H. Wetmore, auditor.

The National Exchange Bank of Baltimore reports at the close of business August 9, 1913, loans and discounts, \$4,218,177; due from banks, \$873,552; cash and due from reserve agents, \$1,004,648; capital stock, \$1,000,000; surplus and undivided profits, \$704,091; circulation outstanding, \$935,297; deposits, \$4,652,048; United States deposits, \$130,711; total resources, \$7,488,149; Waldo Newcomer, president; Summerfield Baldwin, vice-president; R. Vinton Lansdale, cashier; Clinton G. Morgan, assistant cashier.

The First National Bank, Baltimore, Md., reports at close of business August 9, 1913, loans and discounts, \$4,530,072; due from national banks (not reserve agents), \$843,822; due from State and private banks and bankers, trust companies and savings banks, \$187,549; due from approved reserved agents, \$654,923; lawful money reserve in bank, viz., specie, legal-tender notes, \$586,050; capital stock paid in, \$1,000,000; surplus fund, \$350,000; undivided profits, less expenses and taxes paid, \$87,744; dividends unpaid, \$1860; total deposits, \$6,414,520; total resources, \$8,091,625; H. B. Wilcox, president; Blanchard Randall, vice-president; Wm. S. Hammond, cashier; Samuel W. Tschudi and R. E. Bolling, assistant cashiers.

Investment Bankers.

The second annual convention of the Investment Bankers' Association of America will be held on October 28-30 at Chicago. This will be the largest gathering of investment bankers ever held, and representatives from about 500 of the leading investment banking-houses in the United States and Canada will attend. The 75 houses that comprise the Chicago membership in the association are making elaborate plans for this year's meeting. The association completed its organization in New York city a year ago, and has already become well known in America and Europe. Its prime purpose is the betterment of investment banking conditions, with particular attention to these as they exist in the various States. Its recent activities have been along legislative and educational lines with relation to currency and banking questions, the proposed income tax law and the so-called "blue sky" legislation which has become so prominent a feature in State legislative programs during the past year or two.

Bank Merger at Wilmington.

The Murchison National Bank and the Southern National Bank of Wilmington, N. C., have been consolidated under the name of the former, and in connection with the announcement of the merger it is stated that the capital of the Murchison National will, it is expected, be increased soon from \$825,000 to at least \$1,000,000. The capital of the Southern National was \$200,000, and it had a surplus of \$100,000. President Charles N. Evans of the latter is also president of the Atlantic Trust & Banking Co. of Wilmington, which has just moved into new quarters in its eight-story building at Front and Market streets, and it is said that he will now devote all of his time to the latter institution, which was chartered 11 years ago. The officers of the Murchison National are H. C. McQueen, president; J. V. Grainger, vice-president; Jos. W. Yates, cashier, and C. S. Grainger, assistant cashier.

FINANCIAL CORPORATIONS.

- Ala., Birmingham.—The Ruffin A. Smith Securities Co. has filed articles of incorporation; capital \$2000. Ruffin A. Smith, president and treasurer; J. T. Northen, vice-president and secretary.
- Ala., Boaz.—The First National Bank of Boaz has made application to organize; capital \$30,000; organizers, W. H. Bartlett, A. E. Archer, W. E. Noel, W. T. Gillisple and R. E. Borroughs.
- Ark., Grady.—Bank of Grady, capital \$15,000 paid in, will begin business about October 1; directors, J. H. Hellums, president; B. B. F. Ingram, vice-president; M. S. Hastings, J. W. Sanders, S. A. Wood, T. S. Lovett and Dr. E. L. Hutchinson.
- Ark., Morrilton.—First National Bank of Morrilton chartered; capital \$50,000. J. J. Scroggin, president; Clifton Morse, cashier.
- Ark., Sherrill.—The Bank of Sherrill is chartered; capital \$25,000. Directors: J. P. Quattlebaum, president; J. M. Barrett, vice-president; W. J. Payne, secretary and treasurer and cashier; J. W. Gibson, L. M. Quattlebaum, H. L. Fitt and Jo Nichol.
- Ark., St. Louis.—The Central States Trust Co. has filed articles of incorporation; authorized, \$200,000; subscribed, \$100,000; incorporators, F. E. Bryan, R. E. Adreon, Amedee Peling, Charles E. Smith, Charles E. Lane, G. F. Moore, all of St. Louis; S. H. Wyss of Alton, Ill.; Ashley Cabell of Kirkwood, Mo., and Asher R. Cox of Xenia, Ill.
- Fla., Fort Ogden.—The Security Bank is incorporated; capital \$15,000. D. W. Stevenson, president; J. O. Carr, Sr., first vice-president; C. H. Krieger, second vice-president, and E. W. Stevens, cashier.
- Fla., St. Petersburg.—Florida Bank & Trust Co., capital \$100,000, expects to begin business September 1. Local parties are the organizers.
- Ga., Gainesville.—A new bank is reported being organized; capital to be about \$100,000. W. A. Mitchell and Joe A. Webb are the principal promoters.
- Ky., Whitesburg.—The First National Bank of Whitesburg is chartered; capital \$25,000. John D. Fitzpatrick, president; W. H. Courtney, cashier.
- La., Crowley.—Arcadia Abstract Co. incorporated; capital \$10,000. Directors and incorporators: P. J. Chappins, president; W. J. Carmanche, vice-president, Crowley, La.; Lynn S. Nichols, secretary and treasurer, and W. E. Graham of Jennings, La., and P. S. Laurence of Crowley, La. Business is to begin at once.
- La., New Orleans.—The Louisiana Investment & Fiscal Co. is incorporated by A. J. Peters and John F. Kemper.
- Md., Cambridge.—People's Loan, Savings and Deposit Bank, organized with \$100,000 capital, expects to begin business about September 15; directors, Emerson C. Harrington, president; Albanus Phillips and W. G. Winterbottom, vice-presidents; Judge John R. Pattison, William H. Leonard, William H. Hooper, T. Sangston Insley, W. Nicholas Williams, Robert H. Matthews and Vernon S. Bradley of Cambridge; Samuel W. Linthicum of the Neck district; Joseph W. Brooks, Jr., of Madison, Edgar S. Gore of Salem, Francis H. Vincent, Linkwood, and Isaac O. Taylor of Hurlock. W. Hamilton Spedden will be cashier. Offices will be in the Commercial Building, High and Poplar streets.
- Miss., Charleston.—Ben F. Saunders of Swan Lake is organizing new bank. Others interested are T. G. James of Sharkey, W. R. Gay of Glendora and Ben E. Townes of Black Bayou. Business is expected to begin November 1.
- Mo., La Plata.—The Farmers & Merchants' Bank is organized with \$35,000 capital and \$3500 surplus. W. E. Williams, president; J. F. Weaver, first vice-president; J. L. Norfolk, second vice-president; M. E. Tate, cashier, and E. G. Williams, assistant cashier. Directors: W. E. Williams, H. S. Elliott, J. F. Weaver, J. L. Norfolk, Joseph Park, D. D. White, W. W. Daugherty, J. A. Ayers and I. B. Sampson.
- N. C., Black Mountain.—People's Bank of Black Mountain chartered; capital \$5000 to \$25,000. L. L. Jenkins and others, organizers.
- N. C., King.—The Bank of Stokes County has elected the following directors: V. T. Grabs, president; S. W. Pulliam, H. S. Green and C. O. Boyles. Business is expected to begin about November 1.
- N. C., Valle Crucis.—The Valle Crucis Bank is chartered with \$10,000 capital. Directors: L. D. Lowe, president, Banner Elk, N. C.; H. B. Perry, vice-president, Valle Crucis; W. F. Winkler, Watauga Falls, N. C.; W. J. Wagner, Banner Elk, R. F. D., and W. D. Farthing, Boone, N. C.
- Okla., Tishomingo.—The Farmers' National Bank of Tishomingo began business August 7; capital \$30,000; surplus \$2000. B. R. Brundage, president; G. L. Wilson, vice-president, and R. T. Looney, cashier. This is a conversion of the American State Bank.
- S. C., Aiken.—The New South Investment Co. has been granted a commission; capital \$15,000. Petitioners: P. S. Norris, J. A. Seigler and M. E. Seigler.
- S. C., Florence.—The City Savings Bank is chartered; capital \$25,000. Charles E. Commander is president and D. J. Winn, Jr., cashier.
- Tenn., Ripley.—A national bank capitalized at \$25,000 is being organized by W. R. Miller, G. M. Pardee, Wm. Tucker, Jr., W. Dan Majors, Dr. J. A. Porter, W. W. Craig, J. E. Pierson, V. P. Moriarity, H. D. Folts and C. C. Pardee, Jr.
- Tex., Carrizo Springs.—Guaranty State Bank of Carrizo Springs organized with \$10,000 capital; charter applied for; A. Eardley, president; E. Buck, first vice-president; Dr. J. Q. Burton, second vice-president; H. M. Ferguson, cashier; directors, W. T. Gardner, Dr. W. L. Barnard, H. Goodman and A. E. Eardley.
- Tex., Dallas.—Western Indemnity Co. of Dallas chartered; capital \$400,000; surplus \$60,000; incorporators, A. N. Rodgers, John H. Gaston and Thomas B. Love.
- Tex., Dallas.—The International Investment Co. is chartered; capital \$300,000. Incorporators: T. H. Barton, W. F. Ashby and B. Yates.
- Tex., New Castle.—First National Bank of New Castle approved; capital \$25,000. Organizers: R. D. Mugg, J. W. Davis, W. B. Ewalt, R. H. Helm, R. J. Johnson and G. Whaley.
- Va., Swansboro (P. O. Richmond).—South Richmond Bank has begun business. F. P. McConnell, president; J. E. Novell, cashier.
- Va., West Point.—West Point National Bank, capital \$25,000, is being organized by P. B. Hughes, J. W. Wilkinson, F. E. Steere, Crosby Thompson and Walter Sparklin.
- W. Va., Grantville.—People's Bank of Grantville incorporated with \$30,000 capital by R. J. Knotts, G. S. Smith, W. H. Jackson, J. A. C. Smith and B. G. Stump. August 25 directors will be elected.

NEW SECURITIES.

- Ala., Clanton.—An election is to be held to vote on water-works and sewerage bonds.
- Ala., Demopolis.—Voted: \$20,000 of 6 per cent. 10-year school bonds.
- Ala., Fultville.—The \$7000 of sidewalk bonds recently purchased by W. D. Nesbit of Decatur, Ala., at par are 10-year 6 per cents. Address R. A. Summerford.
- Ala., Hamilton.—Marion county will vote November 1 on \$100,000 of 30-year road-building bonds.
- Ala., New Decatur.—The Southern Asphalt & Construction Co., Birmingham, Ala., has purchased \$150,000 of street-improvement bonds.
- Ala., Oneonta.—Steiner Bros. of Birmingham purchased at par \$150,000 of Blount county road bonds.
- Ark., Pine Bluff.—A Cleveland (O.) firm has purchased \$120,000 of 6 per cent. 1-15-year bonds of Road District No. 5. Address Commissioners of said district.
- Fla., Dade City.—Bids will be received until noon September 1 by the Board of County Commissioners, Pasco County, for \$150,000 of 5 per cent. 30-year Pasco county road and bridge bonds; denomination \$1000. Archie J. Burnside is Clerk Circuit Court, Pasco County.
- Fla., Eustis.—City has for sale \$29,000 of 5 per cent. sanitary sewerage system construction bonds.
- Fla., Lake City.—August 26 city will vote on bonds for following purposes: Cancellation of floating indebtedness, \$79,000; city hall site and building, \$8900.
- Fla., Orlando.—September 16 election will be held to vote on \$4000 of 6 per cent. bonds of Special Tax School District No. 34, Orange county; denomination \$500.
- Fla., Sarasota.—C. H. Coffin of Chicago purchased \$15,000 of 6 per cent. 20-year refunding bonds at \$15,055.
- Fla., Wildwood.—Voted: \$15,000 of school-building bonds.
- Ga., Columbus.—Bids will be received until noon September 15 by L. H. Chappell, Mayor, for \$10,000 of 5 per cent. bridge bonds. Denomination \$1000; dated October 1, 1913; maturity October 1, 1914 to 1923.
- Ga., Cornelia.—North Georgia Engineering & Contracting Co., Clayton, Ga., purchased at par \$12,000 of 5 per cent. 30-year water and sewer bonds voted August 16. W. B. Elard is Mayor.
- Ga., La Grange.—City has for sale \$40,000 of 4½ per cent. gas bonds; dated January 1, 1913; maturity 1928 to 1935, inclusive; also \$15,000 of school bonds, same date and interest, maturing 1936 to 1938; denomination \$1000. J. D. Edmundson is Mayor.
- Ga., Savannah.—September 15 city will vote on \$200,000 of 4½ per cent. 25-year auditorium bonds. R. J. Davant is Mayor and Thomas Halligan clerk of Council.
- Ga., Valdosta.—September 15 an election will be held to vote on \$50,000 of bonds for street paving and extension of water mains.
- Ky., Madisonville.—The Kentucky Bank & Trust Co. of Madisonville has been awarded at par \$75,000 of 5 per cent. 5-20-year water-works bonds. W. W. Gatlin is Mayor.
- La., Benton.—Voted July 14: \$175,000 of 5 per cent. bonds of Road District No. 1, Bossier parish; denomination \$1000; maturity September 1, 1914; last bond 1953; date for opening bids not yet decided. Address J. C. Logan.
- La., Covington.—August 16 an election was held in St. Tammany parish to vote on \$50,000 of railroad-aid bonds.
- La., Hammond.—City will vote to decide question of issuing \$40,000 of schoolhouse or \$120,000 of school, drainage and sewerage bonds.
- La., Mansfield.—September 16 city will vote on \$54,000 of water-works and \$16,395 of sewerage 5 per cent. bonds. J. W. Parsons is Mayor.
- La., Marksville.—Bids will be received until 6 P. M. September 1 for \$22,000 of 5 per cent. improvement bonds. Address City Clerk.
- La., Melville.—Voted: Water and light bonds.
- La., Welsh.—September 9 an election is to be held to vote on \$15,000 of electric-light plant bonds.
- Md., Denton.—Nelson, Cook & Co., and Baker, Watts & Co., jointly, have been awarded \$35,000 of 5 per cent. 20-year Caroline county improvement bonds.
- Miss., Carthage.—Beat No. 2, Leake county, voted August 19 on \$30,000 of road bonds. Address Board of Supervisors.
- Miss., Greenwood.—The First National Bank of Greenwood has purchased at \$50 premium the \$100,000 of 5 per cent. 20-year Leflore county road bonds.
- Miss., Grenada.—The Creosoted Wood Block Paving Co., New Orleans, La., purchased at par \$25,000 of 5 per cent. 20-year municipal improvement bonds.
- Mo., Golden City.—Voted: \$12,000 of water-works bonds.
- Mo., Maitland.—\$14,800 of water-works bonds recently voted are reported sold.
- Mo., Dexter.—Voted: \$53,000 of sewer and water-works bonds.
- N. C., Benson.—Voted July 22: \$25,000 of 6 per cent. electric-light and street-improvement bonds; denomination not less than \$100 or over \$1000. Jesse M. Britt is Mayor and L. Busbee Pope Clerk.
- N. C., Greenville.—Application is to be made to the Legislature for authority to hold bond election in School District No. 8, Chitow Township, Pitt county.
- N. C., Hayesville.—The bonds now being offered by Clay county for construction of Hiwassee Valley Railway will be 6 per cent. 30-year coupon bonds, payable semi-annually instead of 5 per cent. bonds, payable annually. Wm. H. Harrison is County Attorney. (See Manufacturers Record, July 31.)
- N. C., Morehead City.—Voted: \$10,000 of Morehead township, Guilford county, school bonds.
- N. C., New London.—Harris township is reported considering the issuing of road-construction bonds.
- N. C., Sanford.—All bids received August 4 for the \$25,000 of 5 per cent. 30-year county home and funding bonds are reported rejected. T. A. Riddle is chairman Board of Commissioners Lee County.
- N. C., Snow Hill.—Voted: Greene county road bonds.
- N. C., Stanley.—Farmers and Merchants' Bank, Stanley, purchased at par \$15,000 of 6 per cent. 10-year bonds for draining Dutchman Creek and tributaries; denomination \$1000; dated July 1, 1913; maturity July 1, 1923. Address W. R. Rutledge.
- N. C., Yadkinville.—Deep Creek township, Yadkin county, proposes to issue \$20,000 of road-construction bonds.
- Okla., Durant.—Defeated: \$150,000 of courthouse and jail construction bonds.
- Okla., Foraker.—City has for sale \$25,000 of 6 per cent. 24-year water bonds.
- Okla., Marietta.—August 25 election will be held to vote on \$35,000 of water-works and sewer system bonds.
- Okla., Poteau.—Defeated: \$75,000 of Le Flore county courthouse bonds. A. B. Green is County Clerk.
- S. C., Dalzell.—An election is to be held to vote on \$4000 of school district bonds. Address District School Trustees.
- S. C., Pacolet.—Voted August 11: \$5000 of Pacolet district bonds; denomination \$500; maturity 1933. Bids are to be asked about the last of August or September; district trustees, D. M. McLaughlin, T. M. Burgess and R. C. Coleman.
- S. C., Ridgeland.—Election is to be held in October to vote on \$8000 of 30-year water-works bonds.
- Tenn., Alamo.—Voted: \$12,000 of school bonds.
- Tenn., Columbia.—The election to be held September 11 is for the purpose of voting on \$100,000 of 5 per cent. 30-year water-works bonds. J. M. Dedman is Mayor.
- Tenn., Knoxville.—Bids are being received by D. G. Leaby, Recorder, for \$20,000 of 6 per cent. one-five-year city improvement bonds; denomination \$500; dated July 1, 1913; also for \$16,282.54 of bonds to pay off present indebtedness.
- Tenn., Lewisburg.—City is offering for sale \$20,000 of 6 per cent. 25-year water-works bonds. C. C. Houston is Mayor. Further particulars will be found in the advertising columns.
- Tenn., Loudon.—C. L. McNear, Chicago, purchased at par the \$150,000 of 5 per cent. 30-year Loudon county bonds.
- Tenn., Memphis.—An ordinance has been prepared providing for the issuing and sale of \$315,000 of 6 per cent. 1-5-year street-improvement bonds; denomination \$1000.
- Tenn., Paris.—City is reported to have sold at par \$65,000 of water, light, sewerage and school bonds.
- Tenn., Paris.—A Cincinnati firm has purchased \$65,000 of water, light and school bonds.
- Tex., Austin.—The Attorney-General has approved the following securities: \$2000 of 5 per cent. 10-20-year bonds of Erlo county common school district No. 5; \$2500 of 5 per cent. 20-year bonds of Erath county common school district No. 51; \$2000 of 5 per cent. bonds of Ellis county common school district No. 36; \$5000 of bonds of 5 per cent. 10-20-year bonds of Cherokee county common school district No. 91; \$4000 of 5 per cent. bonds of Ellis county common school district No. 35; \$15,000 of bonds of Hartley common school district.
- Tex., Corpus Christi.—Bids will be opened on September 10 for \$100,000 of 5 per cent. 40-year improvement bonds of Road District No. 1, Nueces county. Walter F. Timon is County Judge.
- Tex., Corsicana.—Defeated: \$40,000 of Purdon district, Navarro county, bonds.
- Tex., Fort Worth.—E. E. Baldrige, president Waggoner Bank & Trust Co., Fort Worth, purchased at par and accrued interest \$300,000 of water-works and \$175,000 of school bonds. Address Finance Commissioner.
- Tex., Gause.—W. T. Montgomery, San Antonio, is reported to have purchased at par \$50,000 of road bonds.
- Tex., Genoa.—Reported voted: \$3000 of school bonds.
- Tex., Georgetown.—Voted: \$15,000 of Bartlett District, Williamson county, road bonds.
- Tex., Longview.—October 18 election will be held to vote on \$50,000 of Gregg county hospital bonds.
- Tex., Mount Pleasant.—September 16 city will vote on \$20,000 of city hall and crematory bonds.
- Tex., Quanah.—Voted July 28: \$16,000 of sewer and \$20,000 of water-works 5 per cent. 10-40-year bonds; denomination \$500; dated September 1, 1913.
- Tex., Paducah.—Defeated: \$50,000 of Collet county road bonds.
- Tex., Richardson.—Bids will be opened about September 1 for \$16,000 of school bonds.
- Tex., Rockdale.—Bids will be received September 15 for \$27,000 of 5 per cent. 10-40-

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year water-works bonds. E. A. Camp is City Attorney.

Tex., Rosenberg.—Voted: \$9000 of water-works bonds.

Tex., San Augustine.—November 8 election will be held to vote on \$90,000 of courthouse bonds.

Tex., San Antonio.—Bids will be opened about October 1 for \$3,450,000 of 5 per cent. 20-40-year city bonds. Clinton G. Brown is Mayor and E. J. Stickey Secretary.

Tex., Texarkana.—Defeated: \$90,000 of 5 per cent. 40-year sewer bonds.

Tex., Trinity.—September 16 an election is to be held in Trinity county to vote on \$100,000 of Precinct No. 2 road bonds.

Tex., West.—September 30 an election is to be held to vote on \$21,000 of 5 per cent. 40-year water-works bonds.

Tex., West.—September 30 an election will be held to vote on \$21,000 of 5 per cent. 40-year water-works bonds.

Va., Amherst.—Reported that election will soon be held to vote on \$10,000 of fire-protection and electric-light machinery purchase bonds.

Va., Appalachia.—The American Light & Water Co., Chicago, has purchased at par \$21,000 of 5 per cent. 30-year house sewerage system bonds; denomination \$1000; dated July 1, 1913; maturity July 1, 1943. E. A. Collins is Town Recorder.

Va., Galax.—Voted: \$11,000 of 5 per cent. 20-year sewer and water-works bonds. Address D. A. Robertson, Mayor.

Va., Gate City.—Bids will be received until noon September 15 for the following 5 per cent. 20-30-year bonds voted April 29, 1913: Estillville Magisterial District, \$100,000; Fulkerson Magisterial District, \$33,800; Johnson Magisterial District, \$33,300. Address J. F. Richmond, clerk.

Va., Greenville.—Greenville township is reported to have voted \$50,000 of bonds.

Va., Lovington.—E. L. Kidd, Clerk Nelson county, denies report that \$35,000 of road bonds are now being offered.

Va., Manassas.—Voted: \$75,000 of water, light and sewer bonds.

W. Va., Barboursville.—The Ancient Order

of United Workmen, Grand Lodge of West Virginia, purchased at par and accrued interest \$12,500 of 6 per cent. 30-year water-works bonds; denomination \$500; dated July 15, 1913. D. Blaine Shaw is Mayor.

W. Va., Charles Town.—Voted: \$35,000 of bridge bonds.

W. Va., Huntington.—An election is soon to be held to vote on \$800,000 of water-system bonds.

W. Va., Huntington.—A. B. Leach & Co., Chicago, purchased at par \$300,000 of 5 per cent. 30-year street, sewer and incinerator bonds. T. S. Scanlon is Commissioner of Finance.

W. Va., Logan.—Bids will be received until noon September 6 by W. I. Campbell, Clerk, for \$60,000 of 5 per cent. Logan county bridge bonds voted August 2, 1913; denomination \$500.

W. Va., Point Pleasant.—An election is soon to be held to vote on \$75,000 of Mason county courthouse bonds.

W. Va., Philippi.—Bids will be received until noon August 25 by E. H. Compton, City Clerk, for \$15,000 of 6 per cent. 10-15-year municipal bonds voted July 15, 1913.

FINANCIAL NOTES.

Lipscomb Bank & Trust Co., Luling, Tex., has absorbed the Luling State Bank of Luling.

Farmers' Bank & Trust Co., Sumter, S. C., has decided to increase capital from \$120,000 to an amount not exceeding \$200,000.

Lexington City National Bank and First National Bank of Lexington have consolidated under name of First and City National Bank of Lexington, Ky.

Lamar Savings Bank and Guaranty State Bank & Trust Co., both of Lamar, Tex., have merged under the name of Lamar State Bank & Trust Co. with capital of \$150,000.

According to a report from Oklahoma City, Okla., the Tradesmen's State Bank has purchased the business of the Oklahoma State Bank and the two concerns are to be merged under the name of the former, business to be conducted at 105 W. Main St.; Frank J. Wilkoff, president.

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Loans and Discounts.....	\$9,091,404.72	Capital Stock.....	\$ 1,500,000.00
Overdrafts.....	25.62	Surplus and Profits.....	1,677,263.05
U. S. Bonds (Par.).....	1,350,000.00	Circulation.....	1,250,000.00
State of Alabama Bonds...	283,100.00	DEPOSITS	
Other Stocks and Bonds...	660,500.06	Individual... \$	8,919,050.96
Banking House.....	365,500.00	Bank.....	762,866.05
CASH		United States.	123,217.01
In Vault.....	\$1,000,274.67		
With Banks..	1,393,542.06		
With U. S.			
Treasurer..	88,050.00		
	\$ 2,481,866.73		\$ 9,805,134.02
	\$14,232,397.07		\$14,232,397.07

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F. S. FOSTER, Asst. Cashier

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